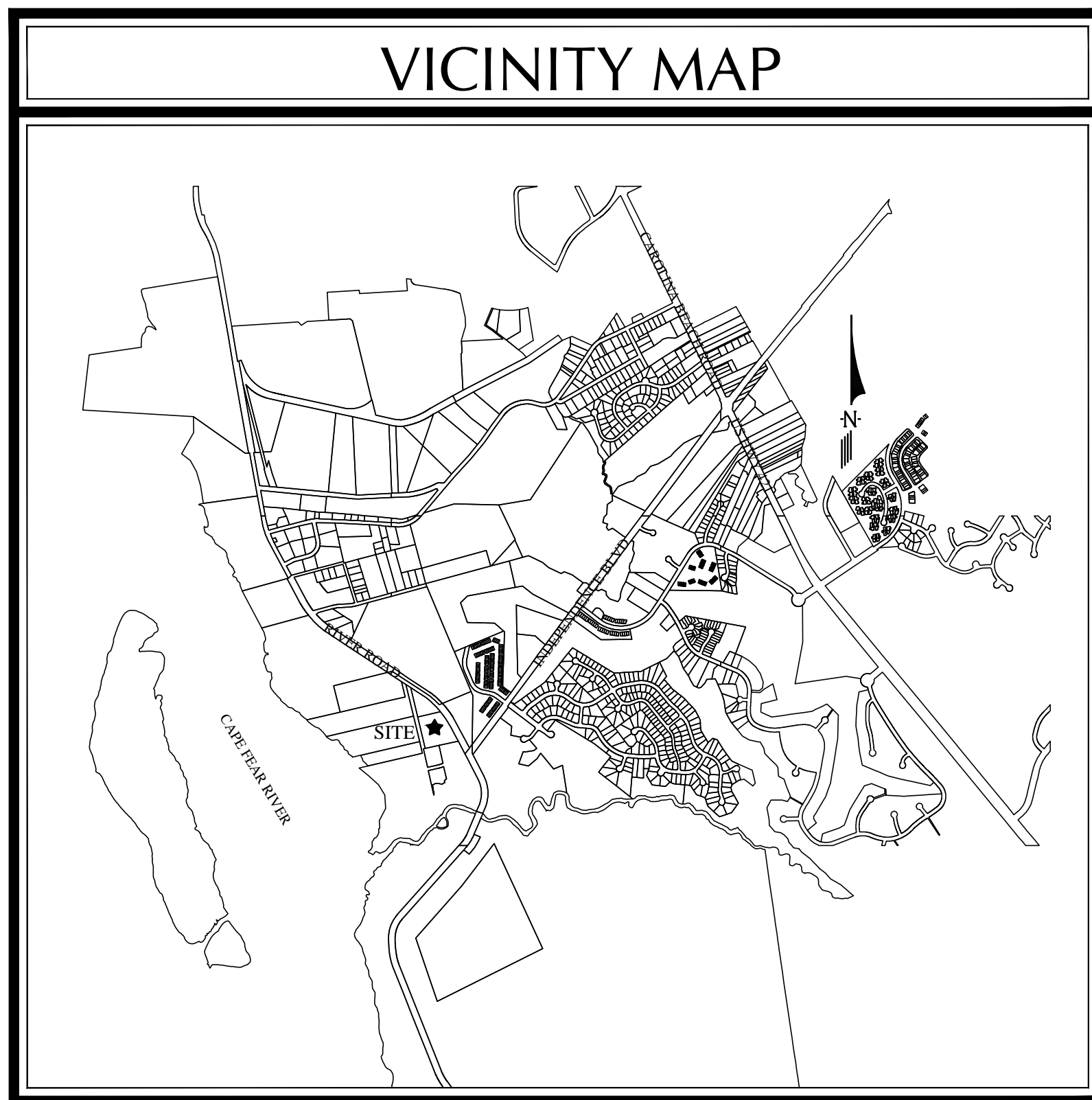
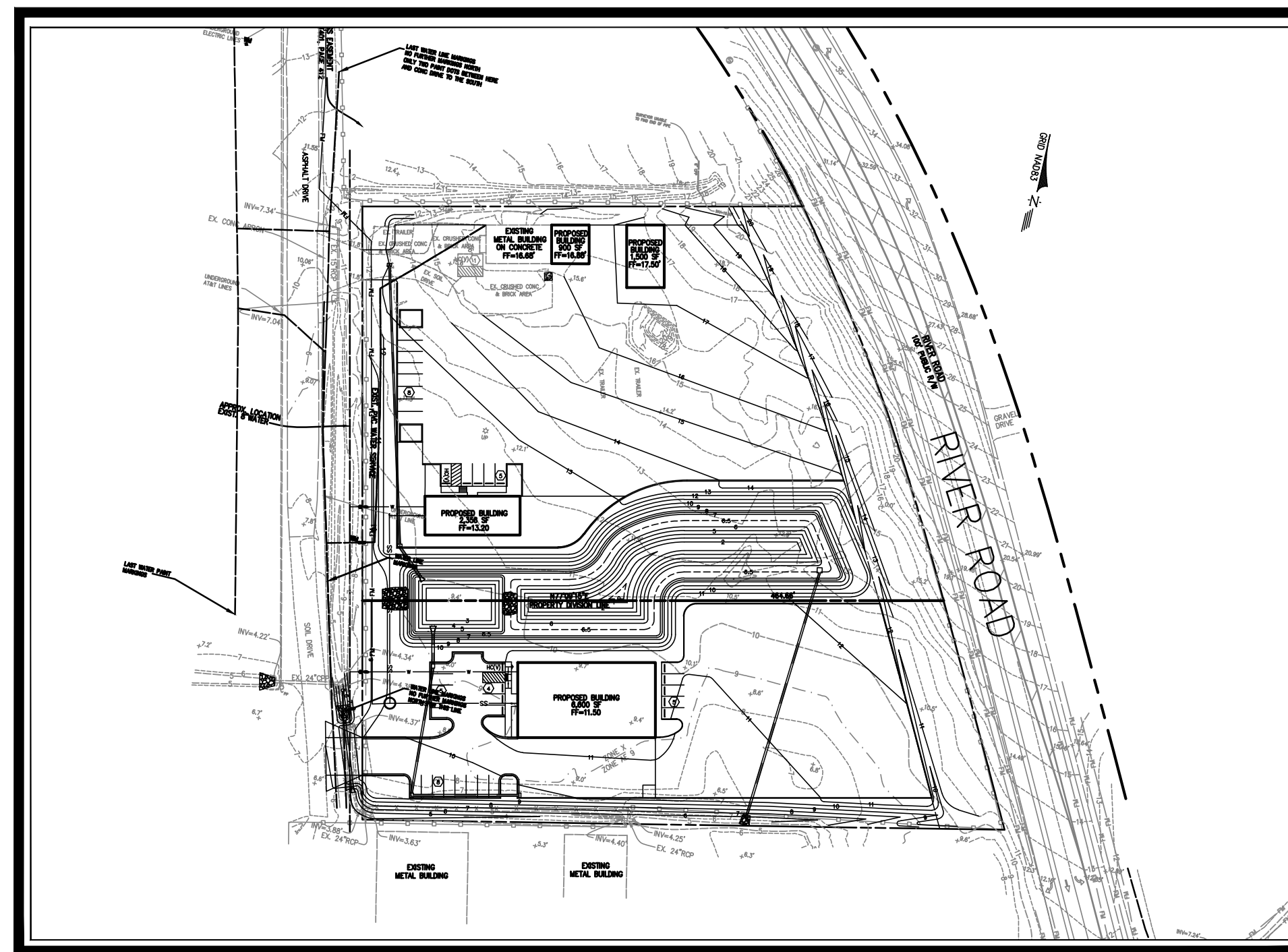


SITE DEVELOPMENT PLAN FOR 4004 & 4018 RIVER ROAD PROPERTIES WILMINGTON, NORTH CAROLINA APRIL, 2018



VICINITY MAP
(NTS)



N.T.S.

DESCRIPTION	EXISTING	PROPOSED
1' CONTOUR INTERVAL	----	----
5' CONTOUR INTERVAL	-----	-----
PROPERTY LINE	=====	=====
ROADWAY CENTERLINE	=====	=====
RIGHT OF WAY LIMITS	=====	=====
EASEMENT LINE	-----	-----
CURB & GUTTER	=====	=====
SANITARY SEWER FACILITIES	○	SS
STORM SEWER FACILITIES	■	■
WATERLINE	—W—	—W—
FIRE HYDRANT ASSEMBLY	⊕	⊕
WATERWAYS	~~~~~	N/A
PROPOSED LOT AND S.F.	X	X
OPEN SPACE LABEL	Ⓐ	Ⓐ
OPEN SPACE	▨	▨
BUILDING SET BACKS	----	----
PRIVATE SANITARY SET BACKS	----	----
	STREET SIGN	STREET SIGN
	404 WETLANDS	404 WETLANDS
	FLOW DIRECTION	FLOW DIRECTION

DEVELOPER/OWNER

4004 & 4018 RIVER ROAD POND
ASSOCIATION, INC
P.O. BOX 15590
WILMINGTON, NC 28408
TEL: 910.612-2650

PREPARED BY:

PORT CITY CONSULTING ENGINEERS, PLLC
6216 STONEBRIDGE ROAD
WILMINGTON, NC 28409
910-599-1744 LICENSE No. P-1032

INDEX OF SHEETS	
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Approved Construction Plan		
	Name _____	Date _____
Planning _____		
Traffic _____		
Fire _____		

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

SITE DATA TABLE	
GENERAL NOTES:	
1. New Hanover County Parcel Nos.: R07000-002-007-000 4004 RIVER ROAD	
2. Total Tract Area: 5.00 ac.± (217,890 s.f.)	
3. Existing Zoning District: LI	Proposed Setback 99', 50', 124' Front 208', 316', 244' Rear 15', NA, 69' Side
Setbacks - 50' Front 35' Rear 0' Side	
4. CAMA Land Classification: Urban & Conservation	
DEVELOPMENT DATA:	
TOTAL TRACT AREA = 5.00 ac	
TOTAL DEVELOPMENT AREA = 5.00 ac	
PROPOSED LOT COVERAGE - CONTRACTOR'S STORAGE YARD & OFFICE	
MAX HEIGHT OF BLDG - 35' MAX	
BUILDING HEIGHT PROVIDED:	
EXISTING BLDG HEIGHT: 18 FT	
PROPOSED BLDG HEIGHT: 20 FT / 20 FT	
BLDG EXISTING - 1 (1,614 S.F. - STORAGE)	
BLDG PROPOSED - 2 (8,956 S.F. - OFFICE)	
BLDG PROPOSED - 2 (2,400 S.F. - STORAGE)	
GROSS BLDG SF - 12,970 S.F.	
IMPERVIOUS SURFACES -	
EXISTING:	
BUILDING -	1,614 S.F. (0.74%)
ABC STONE/GRAVEL -	6,204 S.F.
HC PARKING/CONCRETE -	434 S.F.
TOTAL -	8,252 S.F. (3.8%)
PROPOSED:	
BUILDING -	11,356 S.F. (5.2%)
ASPHALT/GRAVEL -	102,462 S.F.
CONCRETE -	650 S.F.
TOTAL -	114,468 S.F.
TOTAL GROSS IMPERVIOUS AREA -	122,720 S.F. (56.4%)
PARKING:	
MINIMUM PARKING REQUIRED OFFICE: (1 SPACE/300 SF)	30
MAXIMUM PARKING REQUIRED: (1 SPACE/200 SF)	45
MINIMUM PARKING REQUIRED STORAGE: (1 SPACE/1000 SF)	4
TOTAL MINIMUM PARKING REQUIRED:	34
TOTAL PARKING PROVIDED	36
1 - 5 SPACE BICYCLE PARKING	
UTILITY CAPACITY REQUESTS:	
PROPOSED SEWER FLOW: 25 GPD/EMPLOYEE = 25 GPD X 15 EMPLOYEES = 375 GPD	
PROPOSED WATER FLOW: 25 GPD/EMPLOYEE = 25 GPD X 15 EMPLOYEES = 375 GPD	
TRASH: DUMPSTERS LOCATED ON SITE BEHIND ENCLOSURES	
Public Services • Engineering Division APPROVED STORMWATER MANAGEMENT PLAN Date: _____ Permit # _____ Signed: _____	
NOTE: ALL DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH CITY OF WILMINGTON & THE STATE OF NORTH CAROLINA	

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

COORDINATION NOTES

1. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
2. ALL WORK IS TO BE IN ACCORDANCE WITH CITY OF WILMINGTON, NEW HANOVER COUNTY, THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPA) AND THE STATE OF NORTH CAROLINA.
3. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
4. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.

GENERAL NOTES:

1. EXISTING TOPOGRAPHY, BOUNDARY AND UTILITIES, HAVE BEEN PREPARED BY OTHERS.
2. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY REVENUES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
3. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
4. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE DOT.
5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
6. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
7. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
8. CONTRACTOR SHALL REMOVE ASPHALT, AGGREGATE BASE COURSE, AND CONCRETE CURB & GUTTER WITHIN LIMITS OF DEMOLITION AS SHOWN ON PLAN.

DEMOLITION NOTES

1. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY
2. CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
3. DEMOLITION SHALL INCLUDE BUT IS NOT INTENDED FOR DEMOLITION OF OFF-SITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES; ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.
5. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
6. EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION
7. ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.
8. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVER HEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
9. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
10. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.
11. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES:

1. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
2. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON THIS SHEET OF CEASE OF ANY GRADING ACTIVITY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES
4. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY THE NCDENR DIVISION OF LAND QUALITY.
5. WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SOODED AND PLANTED AREAS UNTIL FINAL APPROVAL BY THE NCDENR DIVISION OF LAND QUALITY.
6. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
7. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
3. SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. SILT FENCE STAKES WILL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8 FOOT STAKE SPACING.
4. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
5. INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

6. INSPECT WATTLE AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. SHOULD WATTLE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN TO REDUCE PRESSURE ON THE WATTLE. TAKE CARE TO AVOID DAMAGING OR UNDERMINING THE WATTLE DURING CLEANOUT.
7. INSPECT SILT SACK AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM THE SURFACE AND VICINITY OF THE UNIT AFTER EACH STORM EVENT.

STABILIZATION NOTES

1. ALL DISTURBED AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY AND SLOPES WITHIN 21 CALENDAR DAYS.

PERMANENT SEEDING SCHEDULE - MIXTURE 5CP

SPECIES	RATE (LB/ACRE)
CENTPEDE GRASS	10-20

Seeding Dates
MARCH - JUNE

Soil Amendments
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

Mulch
DO NOT MULCH.

Maintenance
FERTILIZE VERY SPARINGLY LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING

WINTER AND EARLY SPRING

SPECIES	RATE (LB/ACRE)
Rye (GRAIN)	120
*ANNUAL LESPEDEZA (KOBÉ IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

*OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SUMMER

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

FALL

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

Seeding dates

COASTAL PLAIN - DEC.1-APR. 15 - LATE WINTER AND EARLY SPRING
APRIL 15 - AUG. 15 - SUMMER
AUG. 15 - DEC. 30 - FALL

Soil amendments
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

Mulch
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

Maintenance
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

GENERAL GRADING NOTES

1. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF SUCH UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF THE DITCHING OPERATION BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF THE TRENCHING OPERATIONS SO AS TO AVOID AND PREVENT DAMAGE TO THE EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO REPAIRS AND LOSS SERVICE REVENUE. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
2. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
3. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAG MEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE NCDOT.
4. ALL MATERIAL CLEARED AND GRUBBED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK, SUCH AS TREES, VEGETATION, FENCING, ETC., SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE OR BURNED IF PROPER PERMITS ARE RECEIVED.

SITE NOTES

1. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
3. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
4. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
5. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
6. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
7. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
8. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
9. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENT SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER.
10. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE OTHER OBSTRUCTIONS OR FROM DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT NORTH CAROLINA ONE CALL* TOLL FREE 1-800-632-4949 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES.
11. ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION
12. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY, AND LOCAL CODES.
13. FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
16. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

GENERAL STORM SEWER NOTES

1. ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WILMINGTON AND THE STATE OF NORTH CAROLINA REQUIREMENTS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
2. BEDDING FOR ALL STORM SEWER PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND MANUFACTURER SPECIFICATIONS.
3. ALL STORM SEWER PIPES TO BE HDPE ADS N-12 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED.
4. ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.

EXISTING UTILITY NOTES

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
2. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

UTILITY CONTACTS:

1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING AND DIGGING. 1-800-632-4949

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT 1-800-632-4949

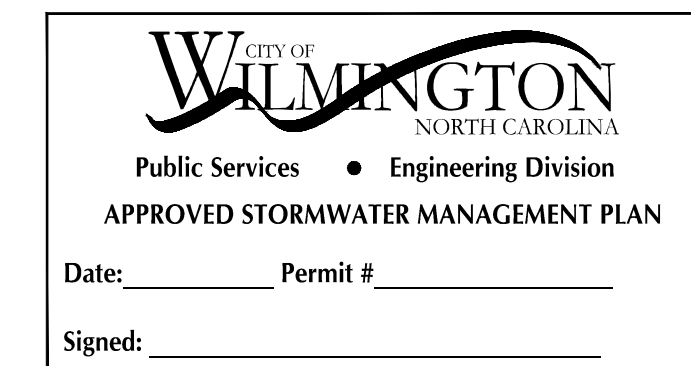
EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

NPDES NOTES		
GROUND STABILIZATION		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

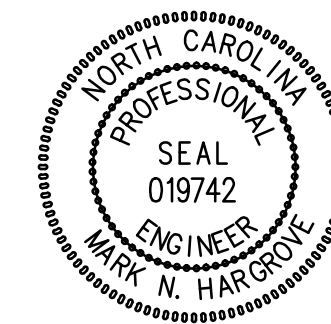
2. BUILDING WASTES HANDLING
 1. NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS
 2. DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVE AVAILABLE.
 3. EARTHEN-MATERIALS STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
 4. CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS OR BUFFERS.
3. INSPECTIONS
 1. SAME WEEKLY INSPECTION REQUIREMENTS
 2. SAME RAIN GAUGE & INSPECTIONS AFTER 0.5" RAIN EVENT
 3. INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS".
 4. INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
 5. RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.
 6. ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.
4. SEDIMENT BASINS
 1. OUTLET STRUCTURES MUST WITHDRAW FROM BASIN SURFACE UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.
 2. USE ONLY DWO-APPROVED FLOCCULENTS.

NPDES - SPECIFIC PLAN SHEET NOTES

1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
2. THIS PAGE CAN BE APPROVED BY THE COUNTY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
3. THIS PAGE OF APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
4. THE COUNTY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR THE PURPOSES OF ENFORCEMENT ACTION UNDER THE COUNTY CODE.



City of Wilmington
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____



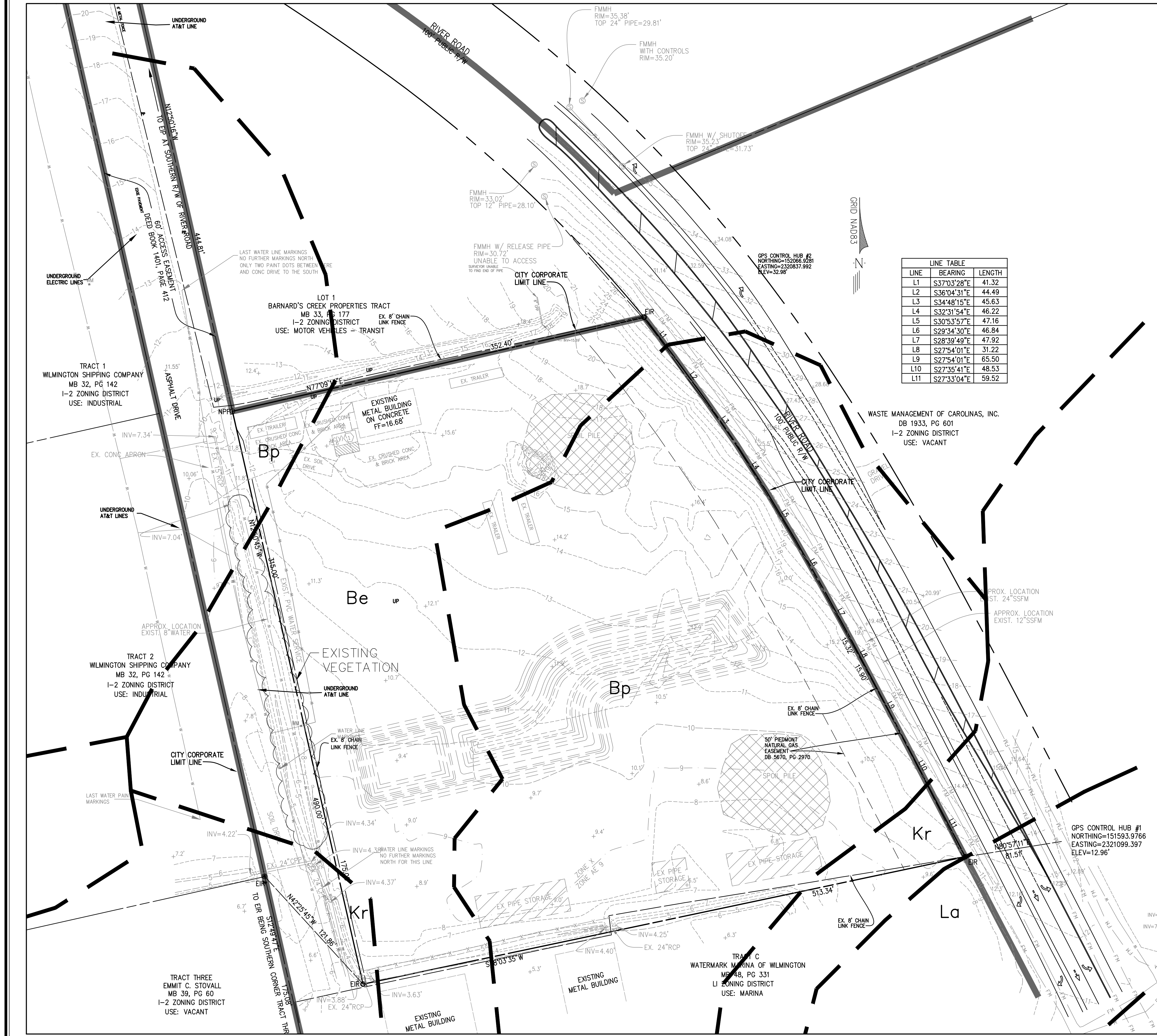
Approved Construction Plan

Name	Date
Planning _____	_____
Traffic _____	_____
Fire _____	_____

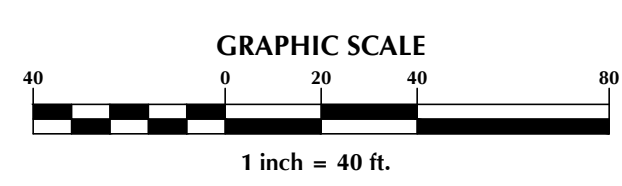
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By	Designer MNH	Scale AS SHOWN	<p>4004 & 4018 RIVER ROAD PROPERTIES</p> <p>WILMINGTON NORTH CAROLINA</p>	<p>4004 & 4018 RIVER ROAD POND ASSOC., INC</p> <p>P.O. BOX 15590 WILMINGTON, NC 28408</p>	<p>PORT CITY CONSULTING ENGINEERS, PLLC 6216 STONEBRIDGE ROAD WILMINGTON, NC 28409 910-599-1744 LICENSE No. P-1032</p>	<p>GENERAL NOTES</p>	<p>Sheet No. C-1</p>
				Drawn By MNH	Date APRIL, 2018					
				Checked By MNH	Job No.					



LINE	BEARING	LENGTH
L1	S37°03'28"E	41.32
L2	S36°04'31"E	44.49
L3	S34°48'15"E	45.63
L4	S32°31'54"E	46.22
L5	S30°53'57"E	47.16
L6	S29°34'30"E	46.84
L7	S28°39'49"E	47.92
L8	S27°54'01"E	31.22
L9	S27°54'01"E	65.50
L10	S27°35'41"E	48.53
L11	S27°33'04"E	59.52



PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Approved Construction Plan	
Name	Date
Planning _____	_____
Traffic _____	_____
Fire _____	_____

Public Services • Engineering Division	
APPROVED STORMWATER MANAGEMENT PLAN	
Date: _____	Permit # _____
Signed: _____	

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No.	Revision	Date	By

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	APRIL, 2018
Checked By	MNH	Job No.	

4004 & 4018 RIVER ROAD PROPERTIES

WILMINGTON NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC
 P.O. BOX 15590
 WILMINGTON, NC 28408

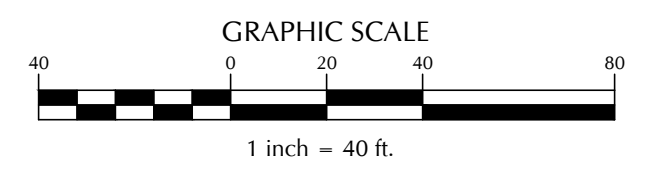
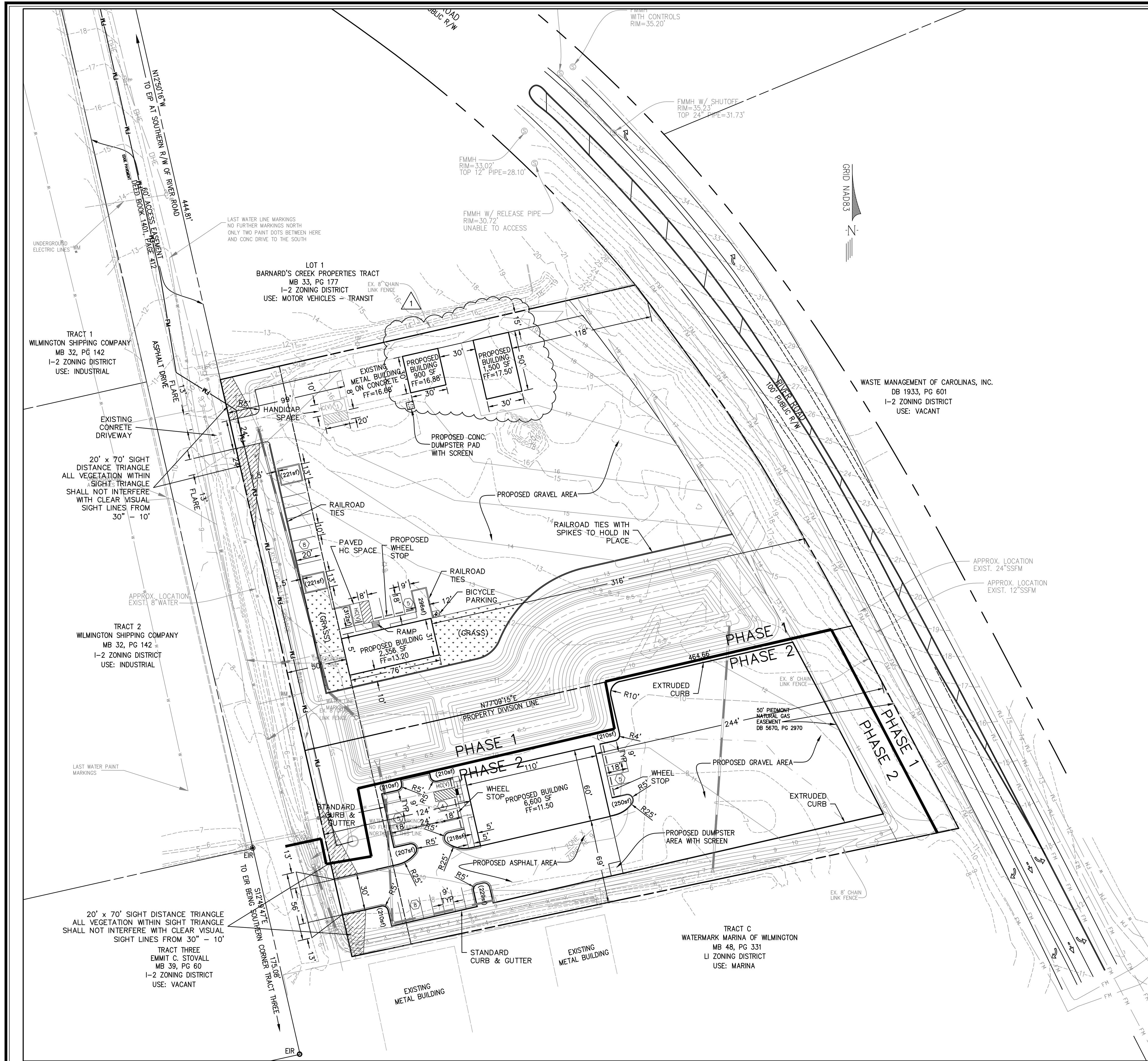
PORT CITY CONSULTING ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
 910-599-1744 LICENSE No. P-1032

EXISTING CONDITIONS

Sheet No.
C-2

GENERAL NOTES

1. THE PROPERTY DELINEATED HEREON IS LOCATED IN THE CITY OF WILMINGTON AND IDENTIFIED ON NEW HANOVER COUNTY GIS AS PARID: R07000-002-007-000.
2. THE PERMITTEE WILL BE RESPONSIBLE FOR THE MAINTENANCE OF STORM WATER DETENTION/DRAINAGE FACILITIES AND RESPECTIVE EASEMENTS.
3. BOUNDARY AND TOPOGRAPHIC DATA SHOWN HEREON IS TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY ROBERT G. SESSOMS, PLS, P.C. DATED APRIL 23, 2013 EXCEPT FOR SOUTHWEST CORNER RE-SURVEYED MAY 28, 2013. VERTICAL DATUM OF SURVEY IS NAVD 88. HORIZONTAL DATUM OF SURVEY IS NAVD88.
4. EROSION AND SEDIMENT CONTROL STANDARDS SHALL BE PROVIDED IN ACCORDANCE WITH THE NEW HANOVER COUNTY SOIL EROSION AND SEDIMENT CONTROL ORDINANCE.
5. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CITY OF WILMINGTON.
6. THE APPROVAL OF THESE PLANS SHALL NOT RELIEVE THE OWNER/DEVELOPER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UNDERGROUND FACILITIES PRIOR TO THE CONSTRUCTION INCLUDING TEST HOLES TO PHYSICALLY LOCATE UNDERGROUND UTILITIES AS NECESSARY. RESULTS OF TEST PITS SHALL BE PROVIDED TO THE ENGINEER FOR CONFORMATION PRIOR TO CONSTRUCTION.
8. THESE PLANS MAKE NO REPRESENTATION AS TO SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
9. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES, AS SHOWN HEREON, ARE APPROXIMATE ONLY. NO GUARANTEE IS HEREIN MADE OR IMPLIED THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN. IT SHALL BE THE CONTRACTOR'S AND/OR THE OWNER'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES AND TO VERIFY THE TYPE, SIZE, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO STARTING THE WORK. ANY DISCREPANCIES IN OR FROM THE INFORMATION SHOWN HEREON SHALL BE REPORTED TO URBAN, LTD. PRIOR TO COMMENCING CONSTRUCTION.
10. ALL WORK MUST COMPLY WITH NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY COD VOL. 1C.
11. PUBLIC UTILITIES (WATER AND SANITARY SEWER) SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE CAPE FEAR PUBLIC UTILITY AUTHORITY.
12. ALL UTILITIES, BOTH PUBLIC AND PRIVATE, SHALL BE UNDERGROUND.
13. PROJECT SITE DRAINS TO THE CAPE FEAR RIVER, WHICH HAS A WATER CLASSIFICATION OF SC, STREAM INDEX NO. 18-(71) PER NCDENR DWQ NORTH CAROLINA WATERBODIES.
14. THE PROPOSED USE IS NON-RESIDENTIAL.
15. THERE ARE NO WETLANDS ON SITE.
16. THIS PROPERTY IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, FIRM COMMUNITY PANEL MAP #3720313800J, DATED APRIL 3, 2006.
17. THE PROPERTY IS NOT LOCATED IN A SPECIAL HIGHWAY OVERLAY DISTRICT, THE DAWSON-WOOSTER CORRIDOR, WRIGHTSVILLE AVENUE CORRIDOR, OR SOUTH 17TH STREET/INDEPENDENCE BOULEVARD CORRIDOR.
18. THE PROPERTY MAY BE LOCATED WITHIN A CONSERVATION OVERLAY DISTRICT (COD). IF THE CITY DETERMINES PROPERTY IS LOCATED WITHIN A COD, THEN CONSERVATION RESOURCES AND ITS ASSOCIATED SETBACKS WILL BE PROTECTED IN ACCORDANCE TO THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
19. SOLID WASTE DISPOSAL WILL BE PROVIDED BY DUMPSTERS.
20. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
21. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIAL WILL OCCUR IN THOSE AREAS.
22. NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
23. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
24. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
25. TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
26. CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
27. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY OF WILMINGTON AND/OR NCDOT STANDARDS.
28. ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
29. A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW PRIOR TO THE RECORDING OF THE FINAL PLAT.
30. CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.



Approved Construction Plan

Name	Date
Planning _____	_____
Traffic _____	_____
Fire _____	_____

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By
1	BUILDING ADDITION	8/20/18	MNH

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	APRIL, 2018
Checked By	MNH	Job No.	

4004 & 4018 RIVER ROAD PROPERTIES

WILMINGTON NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC

P.O. BOX 15590
WILMINGTON, NC 28408

PORT CITY CONSULTING ENGINEERS, PLLC
6216 STONEBRIDGE ROAD
WILMINGTON, NC 28409
910-599-1744 LICENSE No. P-1032

SITE LAYOUT PLAN

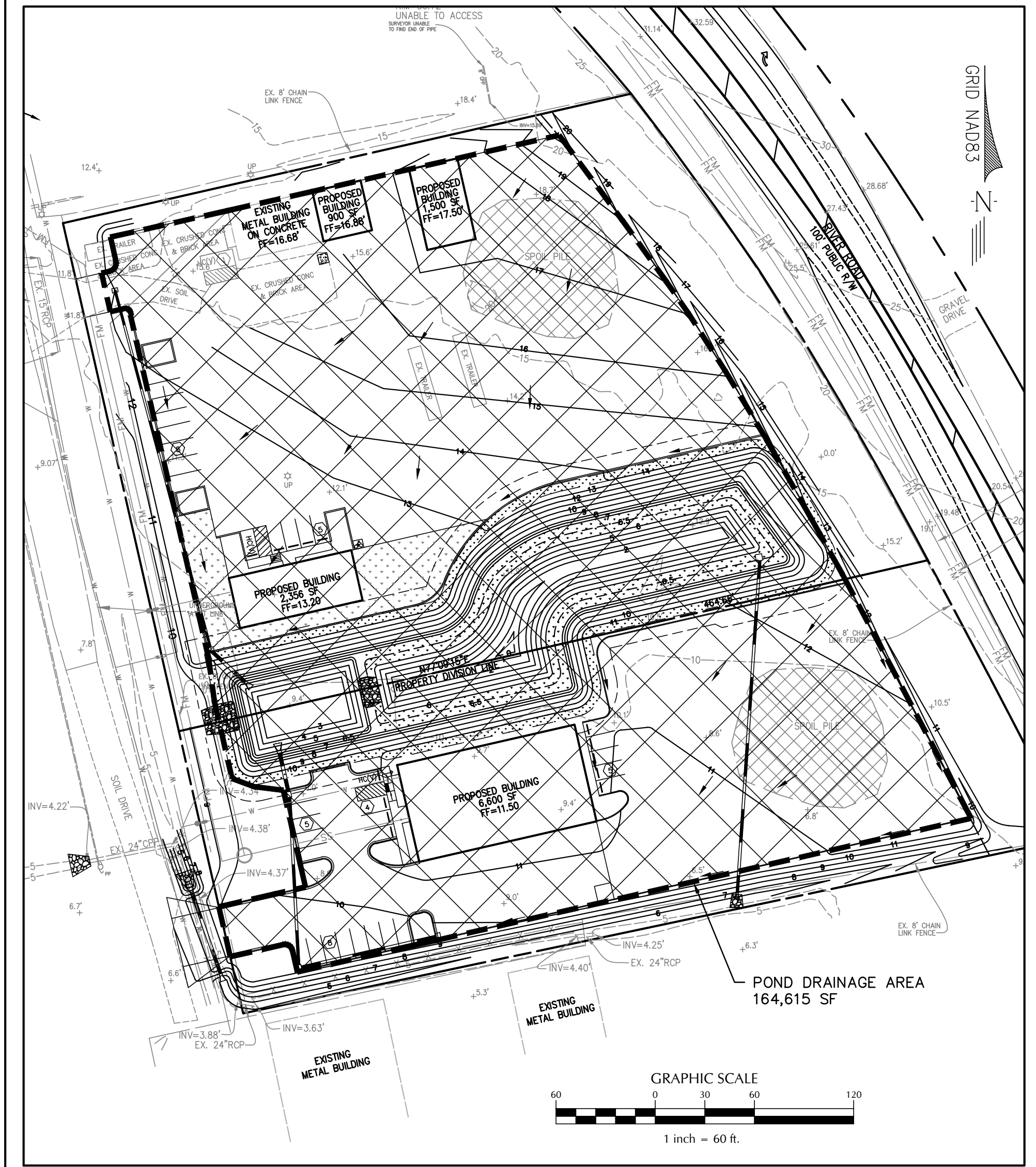
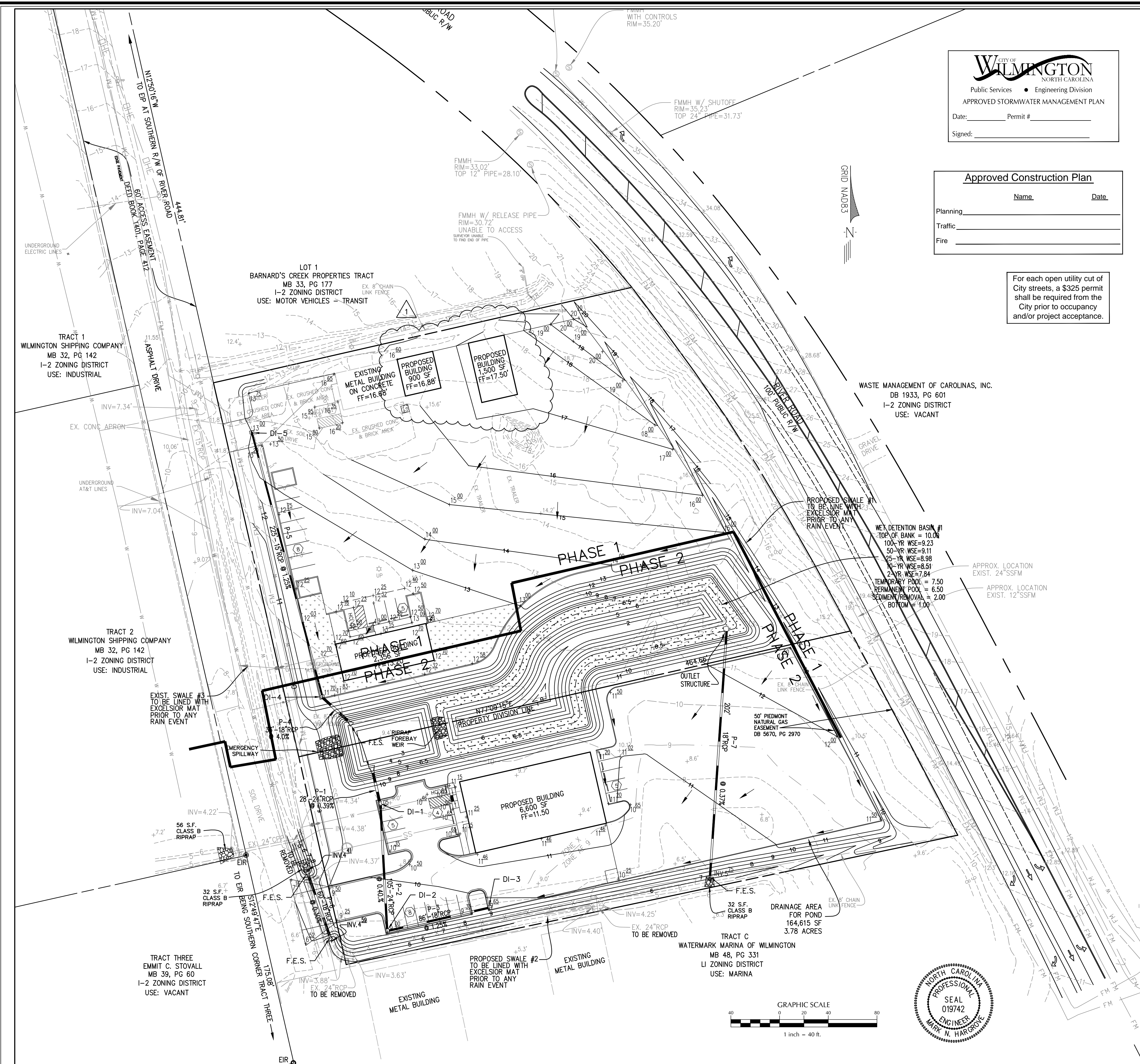
Sheet No. **C-3**

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name	Date
Planning	_____
Traffic	_____
Fire	_____

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STORM CULVERT TABLE

CULVERT NUMBER	CULVERT LENGTH (FT)	CULVERT SIZE (IN)	CULVERT SLOPE (%)	INVERT DOWN (FT)	INVERT UP (FT)	PIPE MATERIAL
P-1*	28	24	0.39	4.50	4.61	RCP
P-2	105	24	0.40	4.61	5.03	RCP
P-3	87	18	1.25	5.03	6.11	RCP
P-4*	32	18	0.99	5.00	6.00	RCP
P-5	225	15	1.25	6.32	9.13	RCP
P-6	60	18	0.30	4.41	4.59	RCP
P-7*	185	18	0.37	5.75	6.50	RCP

* NOTE: LENGTH INCLUDES FLARED END SECTION

STORM STRUCTURE TABLE

STRUCTURE NUMBER	INVERT (FT)	RIM ELEVATION (FT)
DI-1	4.61	10.05
DI-2	5.03	9.00
DI-3	6.11	9.65
DI-4	6.32	11.70
DI-5	9.13	13.00



PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By
1	BUILDING ADDITION	8/20/18	MNH

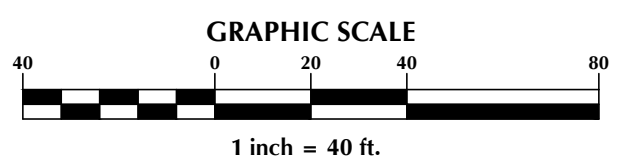
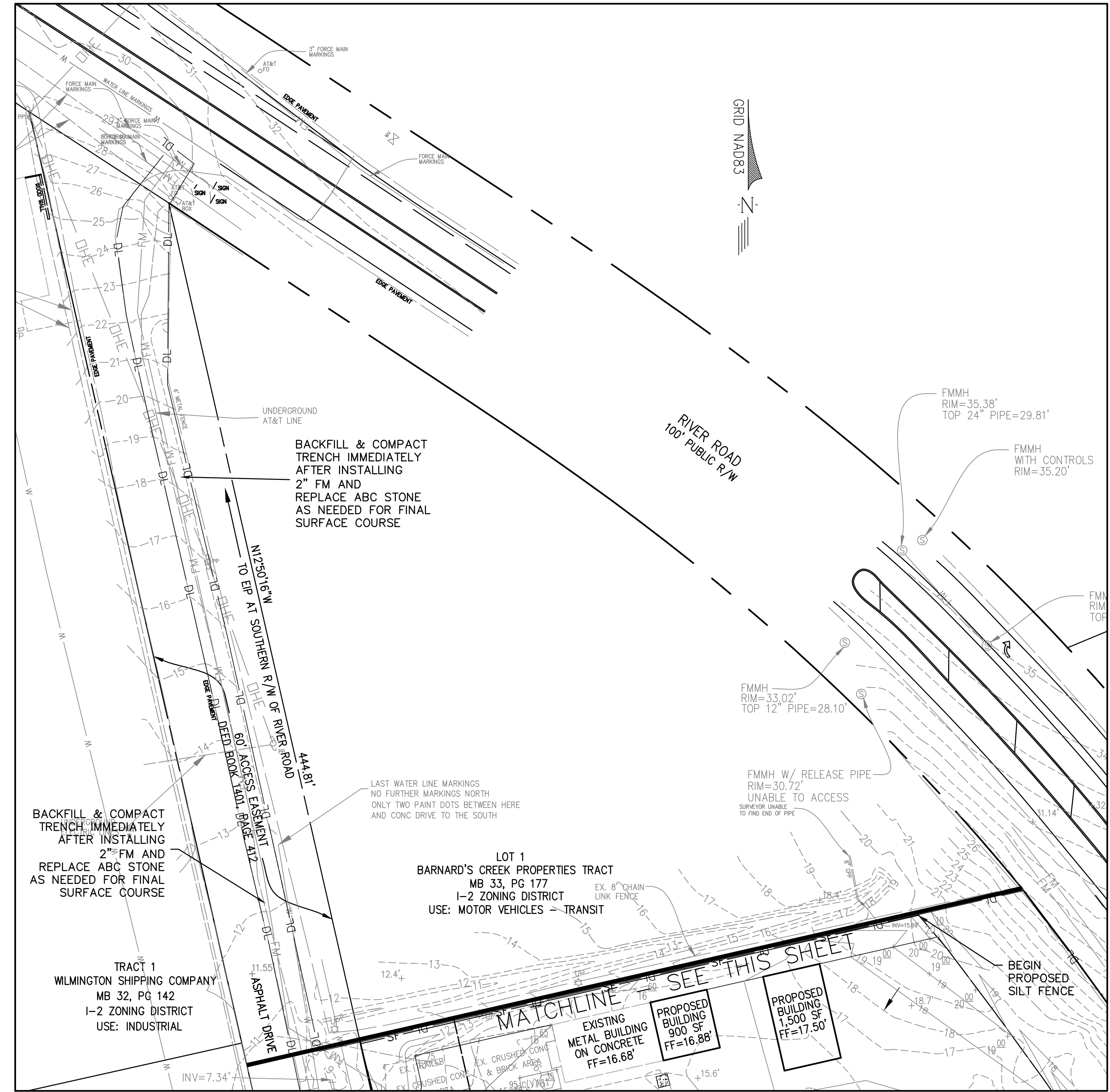
4004 & 4018 RIVER ROAD PROPERTIES
 WILMINGTON NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC
 P.O BOX 15590
 WILMINGTON, NC 28408

PORT CITY CONSULTING ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
 910-599-1744 LICENSE No. P-1032

GRADING & DRAINAGE PLAN

Sheet No. C-4



PRELIMINARY - DO NOT USE FOR CONSTRUCTION

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

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No.	Revision	Date	By

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	APRIL, 2018
Checked By	MNH	Job No.	

4004 & 4018 RIVER ROAD PROPERTIES

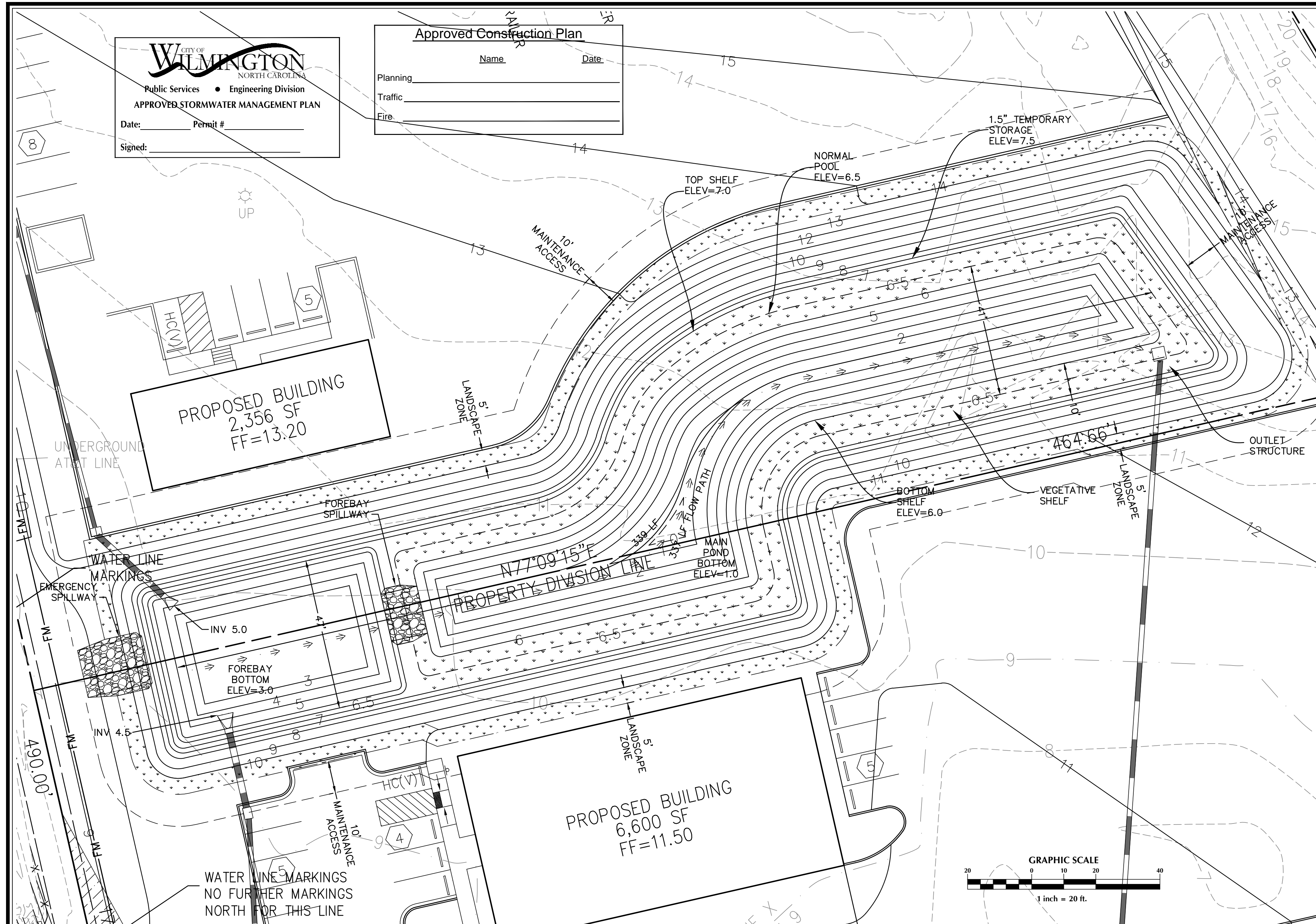
WILMINGTON NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC
P.O. BOX 15590
WILMINGTON, NC 28408

PORT CITY CONSULTING ENGINEERS, PLLC
6216 STONEBRIDGE ROAD
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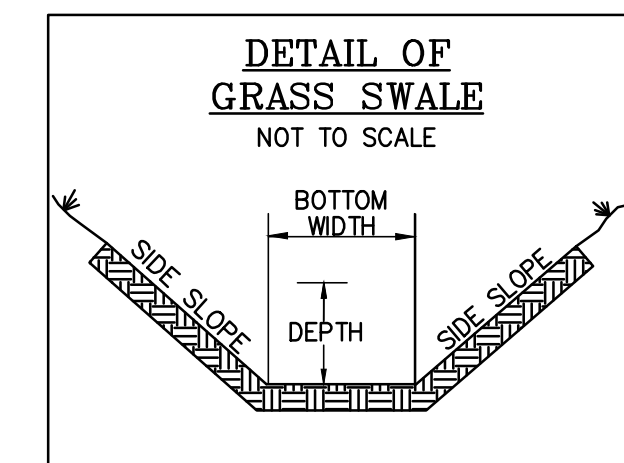
EROSION CONTROL PLAN

Sheet No.
C-5



SWALE DATA

LOCATION	Q ₁₀ (cfs)	BOTTOM WIDTH (ft.)	SIDE SLOPE LEFT	SIDE SLOPE RIGHT	CHANNEL SLOPE (%)	MANNINGS COEF. n	DEPTH (ft.)	VELOCITY (ft/s)	TYPE OF SWALE LINING
SWALE #1	5.58	0	3:1	3:1	1.69%	0.030	0.76	3.25	TALL FESCUE
SWALE #2	6.80	0	3:1	3:1	0.30%	0.030	1.10	1.76	TALL FESCUE
SWALE #3	11.05	0	3:1	3:1	0.63%	0.030	1.18	2.66	TALL FESCUE

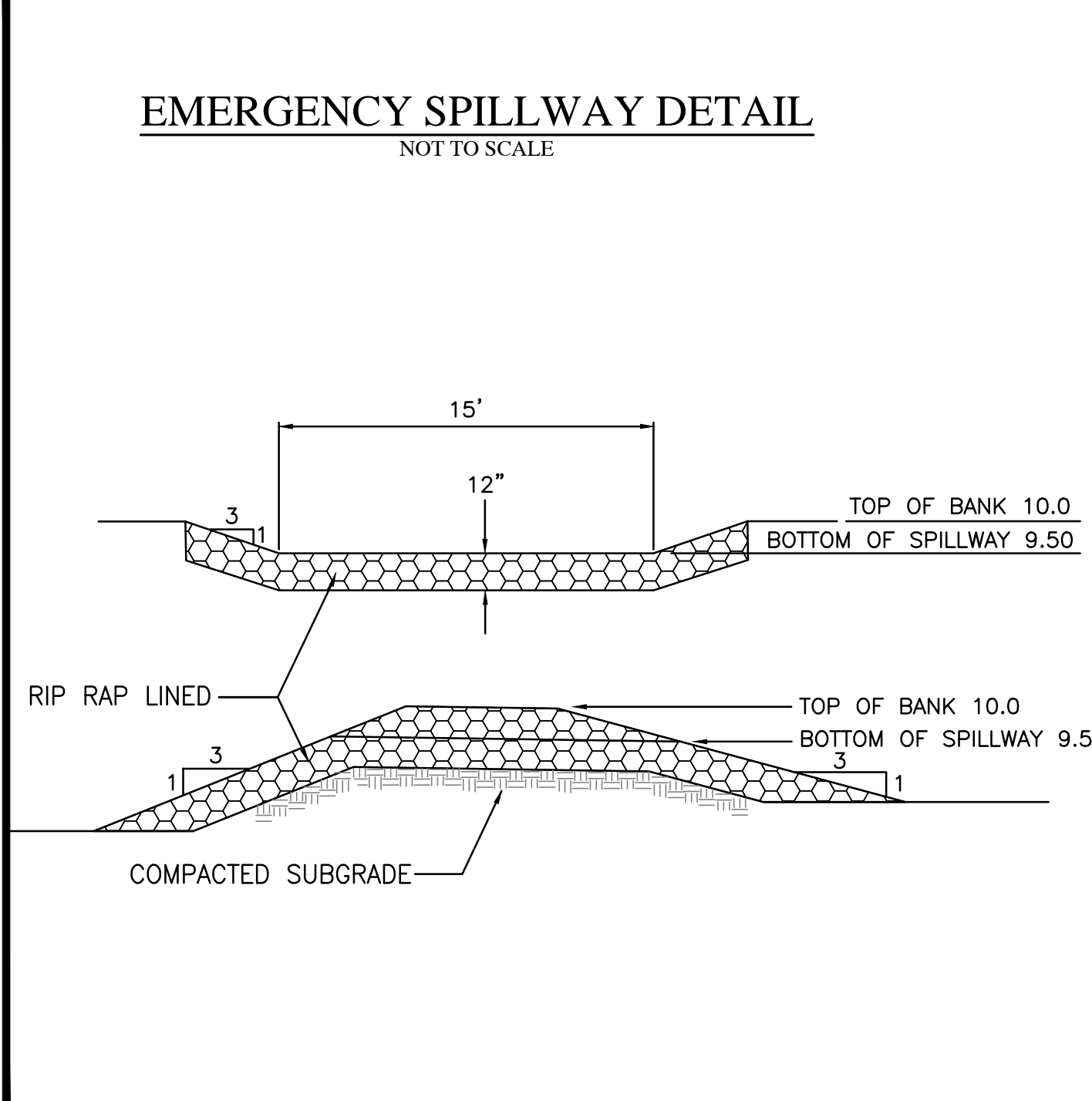
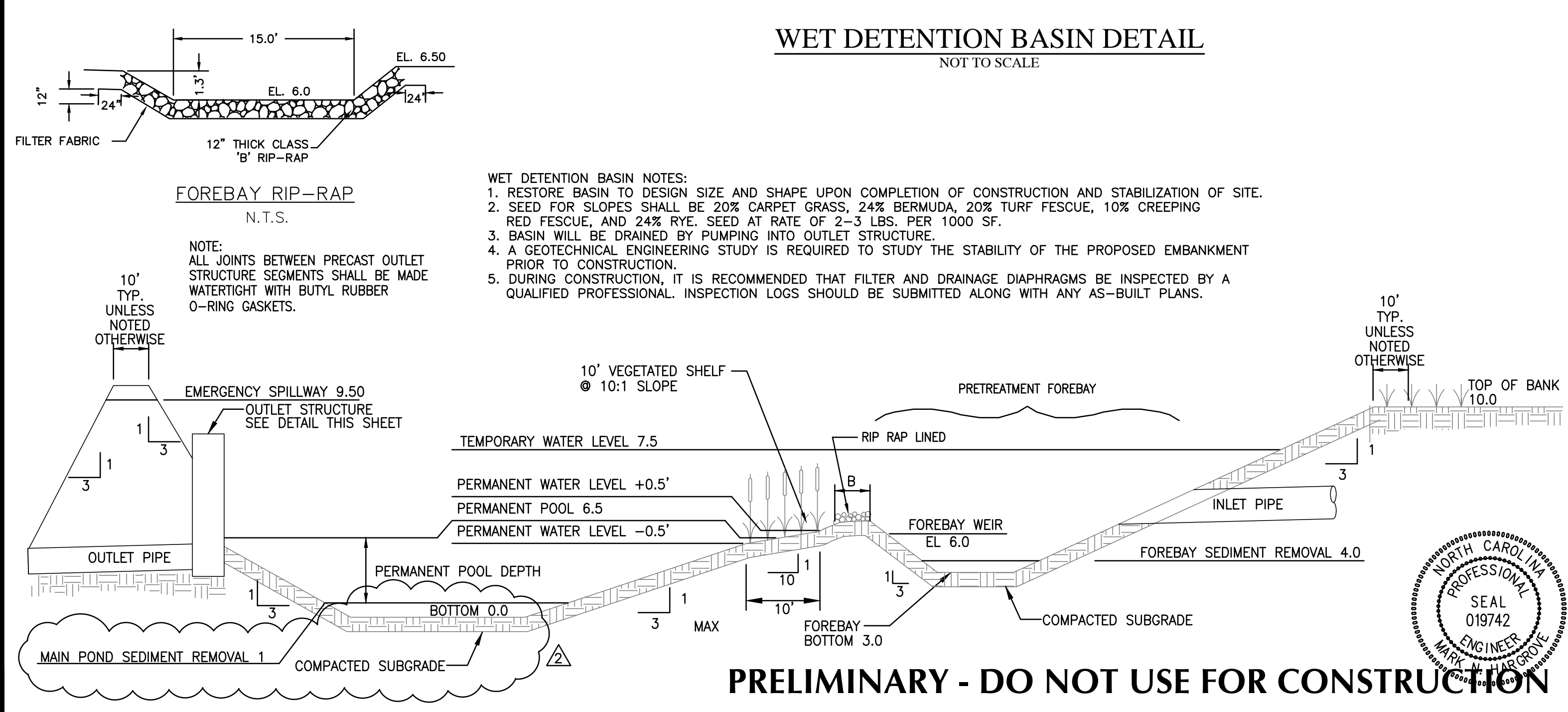
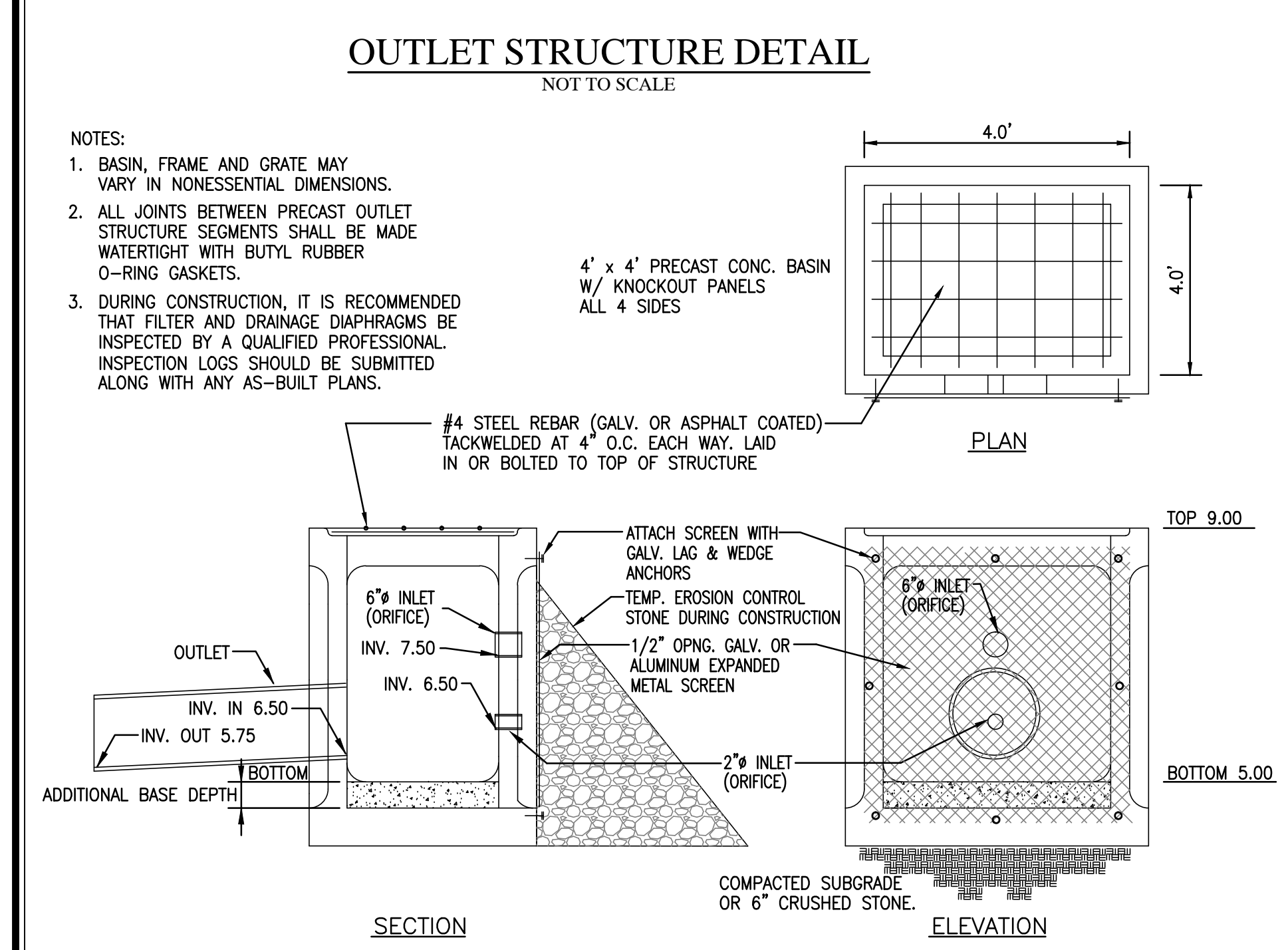
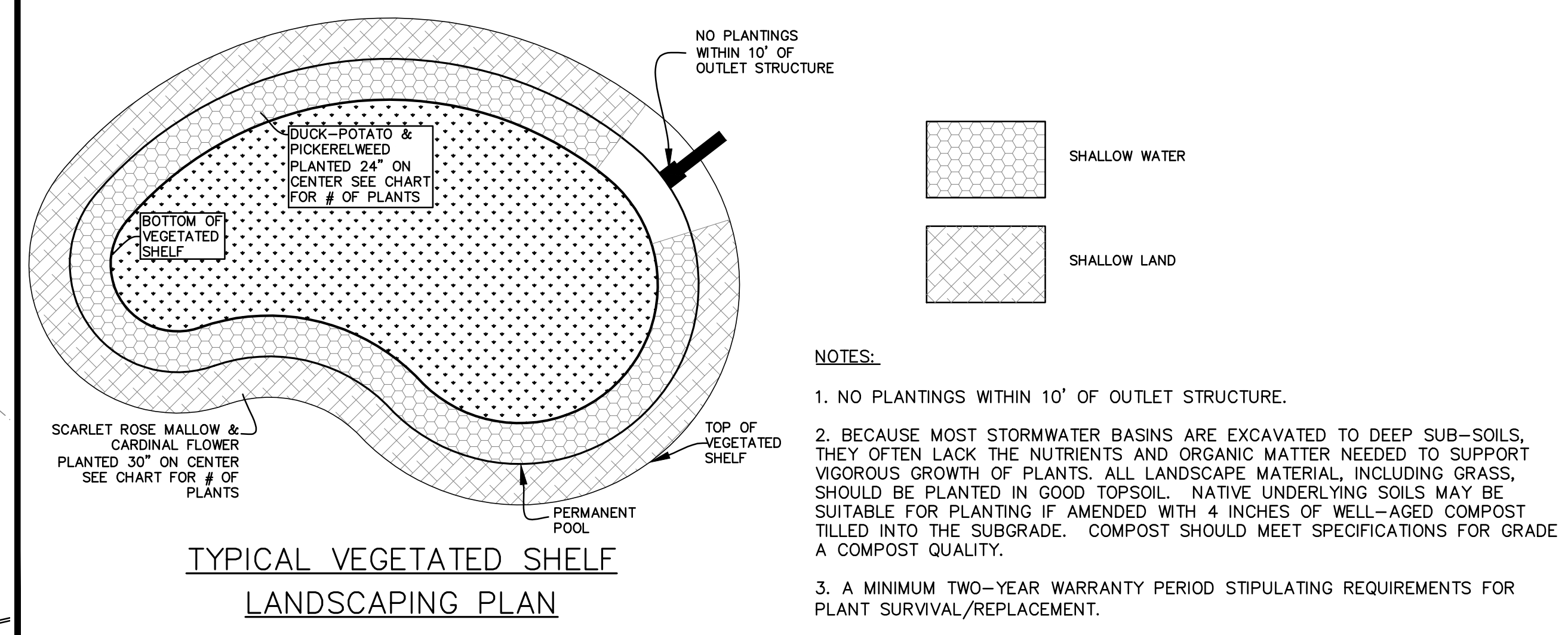


SHALLOW WATER COMMUNITY (NORMAL POOL TO SHELF BOTTOM) = 3,060 S.F.
@ 1 PLANT PER 4 SF (24" O.C.) - 765 PLANTS

PLANT TYPE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	CALIPER	HEIGHT	NOTES
HERBACEOUS	382	Sagittaria latifolia	Duck Potato	CONT.	4" Pot		24" O.C.
	383	Pontederia cordata	Pickereelweed	CONT.	4" Pot		24" O.C.

SHALLOW LAND COMMUNITY (NORMAL POOL TO SHELF TOP) = 3,034 S.F.
@ 1 PLANT PER 6.25 SF (30" O.C.) - 485 PLANTS

PLANT TYPE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	CALIPER	HEIGHT	NOTES
HERBACEOUS	243	Hibiscus coccineus	Scarlet Rose Mallow	CONT.	4" Pot		30" O.C.
	242	Lobelia cardinalis	Cardinal Flower	CONT.	4" Pot		30" O.C.



No.	Revision	Date	By

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	APRIL, 2018
Checked By	MNH	Job No.	

4004 & 4018 RIVER ROAD PROPERTIES

NEW HANOVER COUNTY NORTH CAROLINA

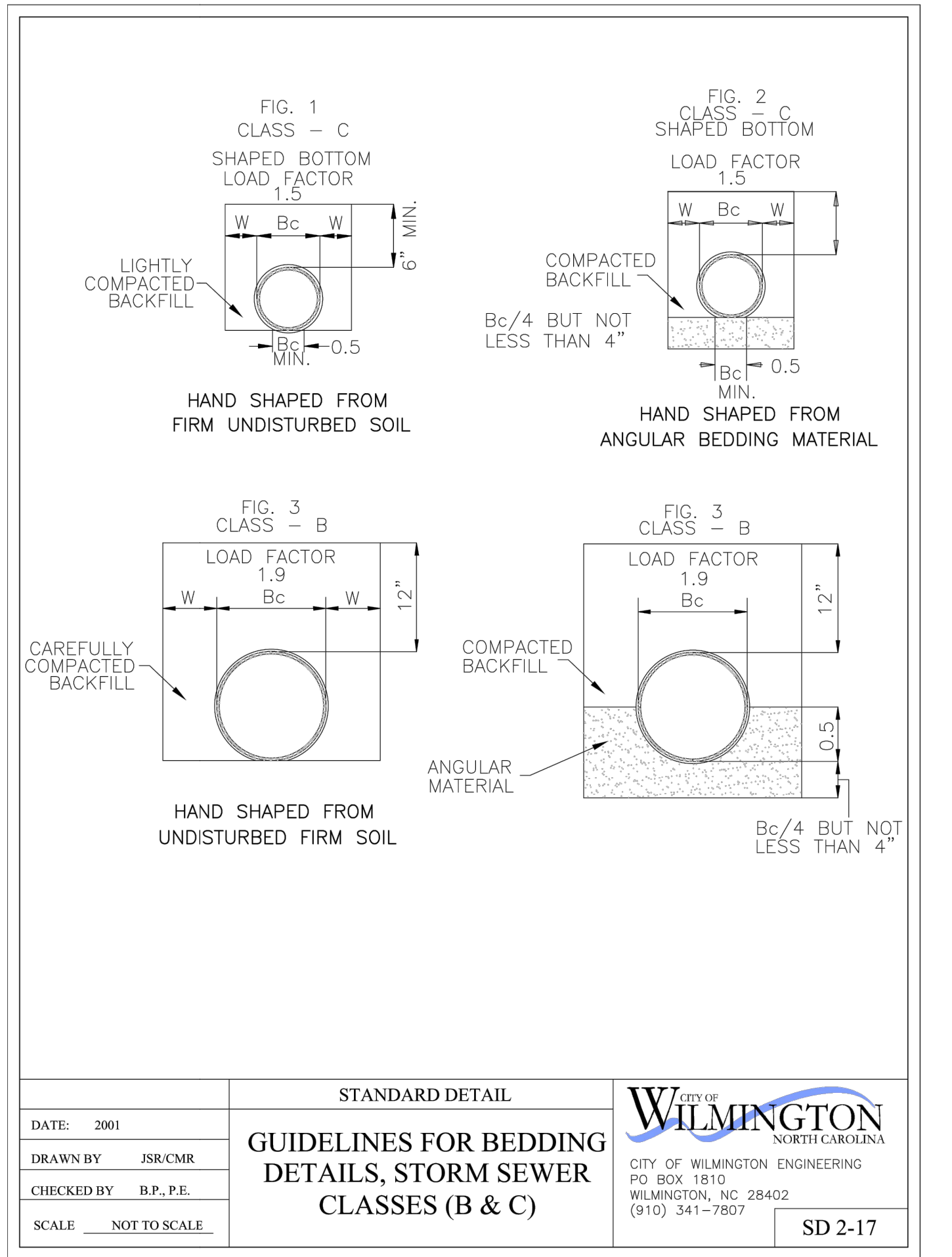
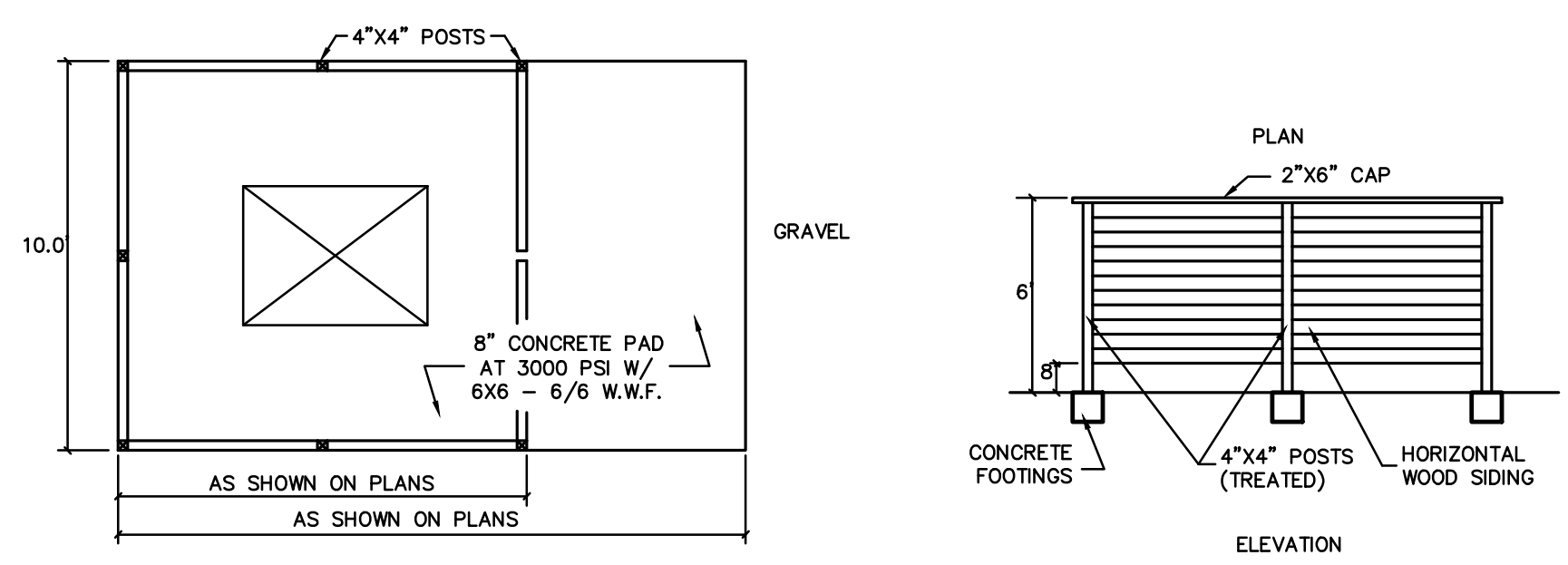
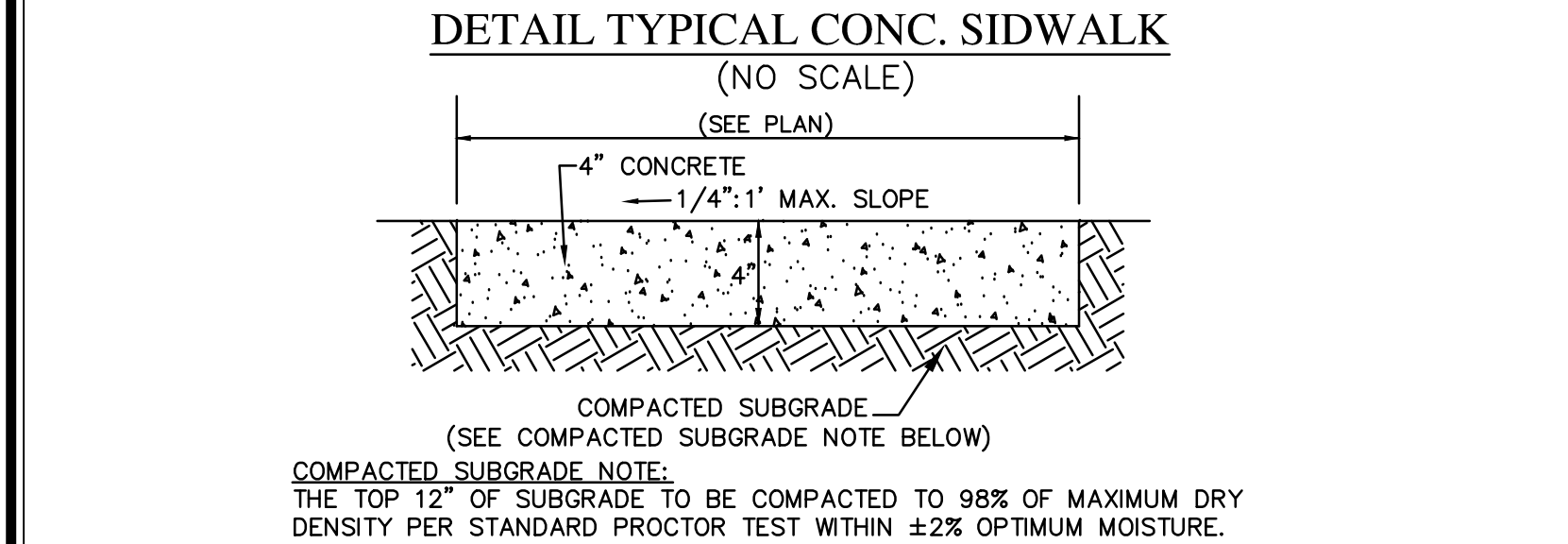
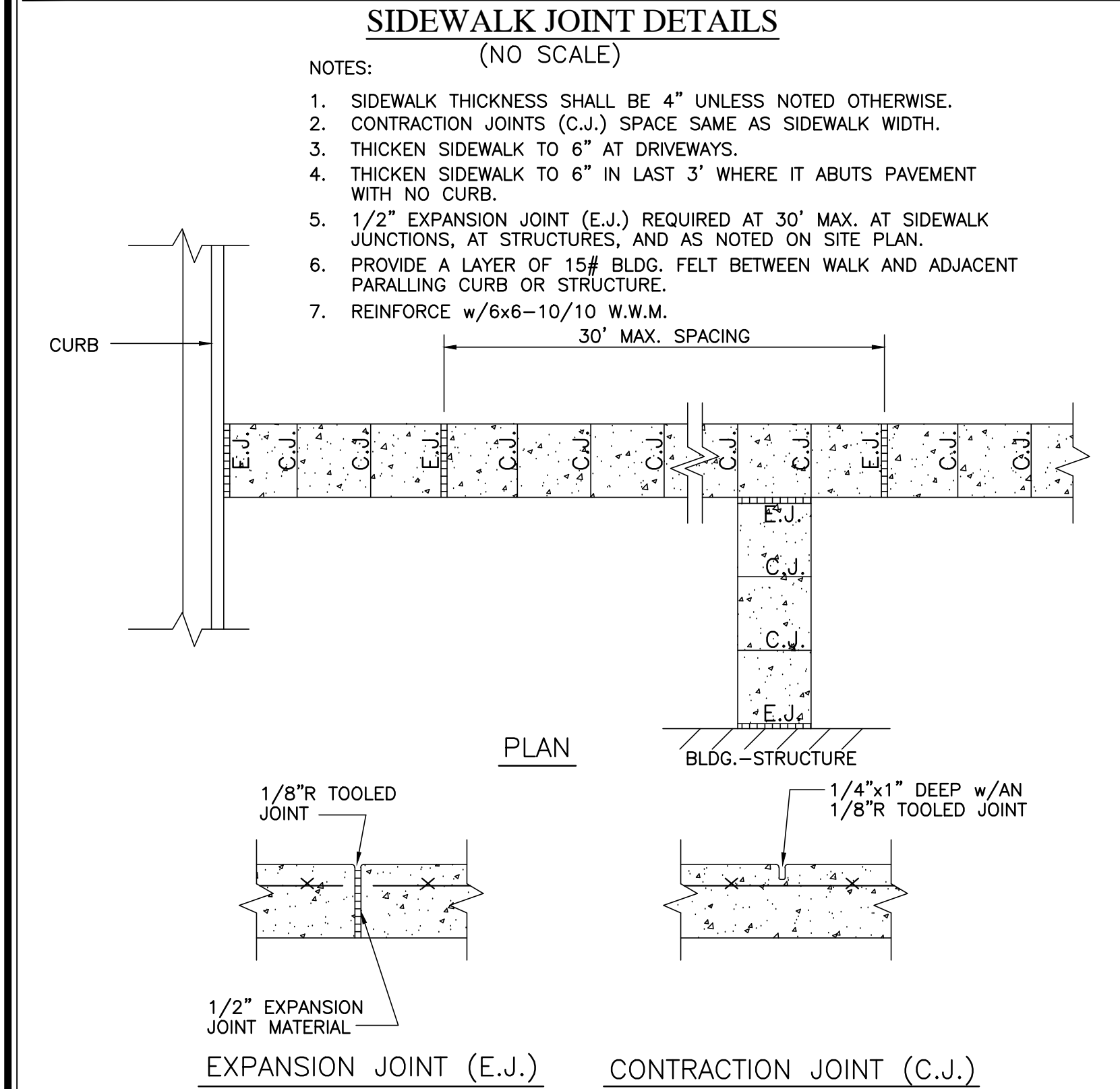
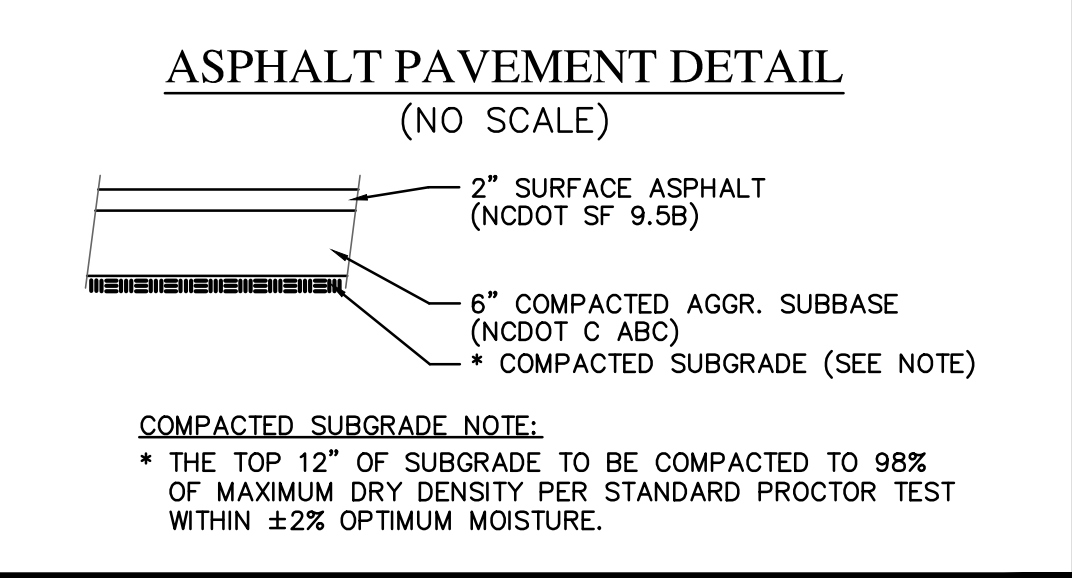
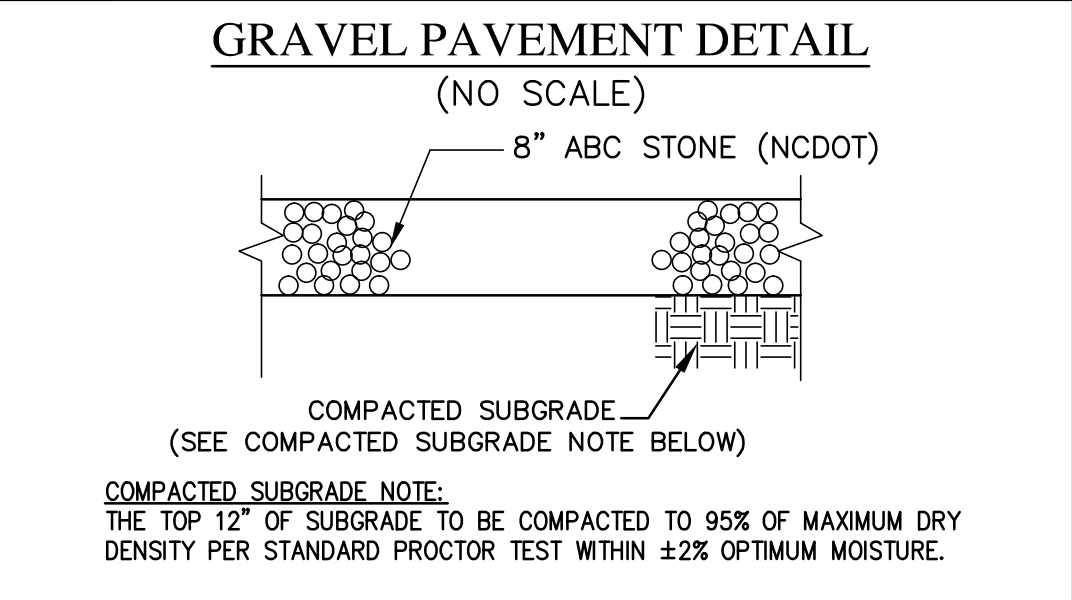
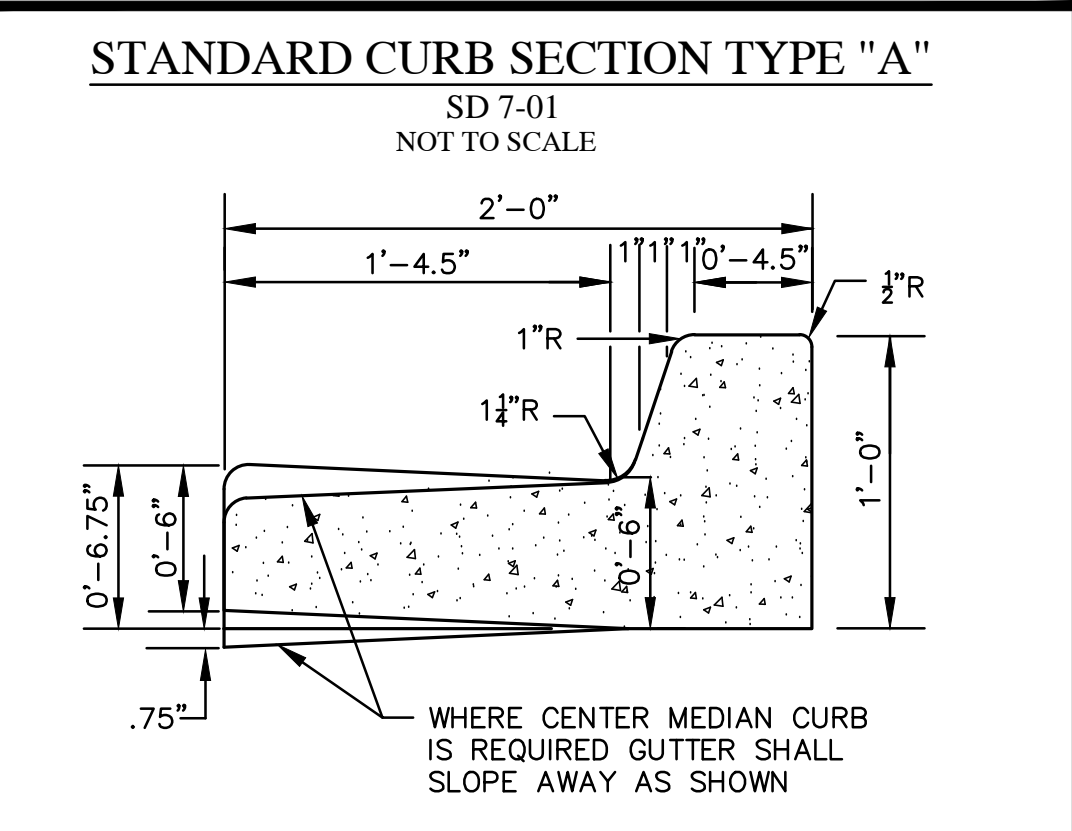
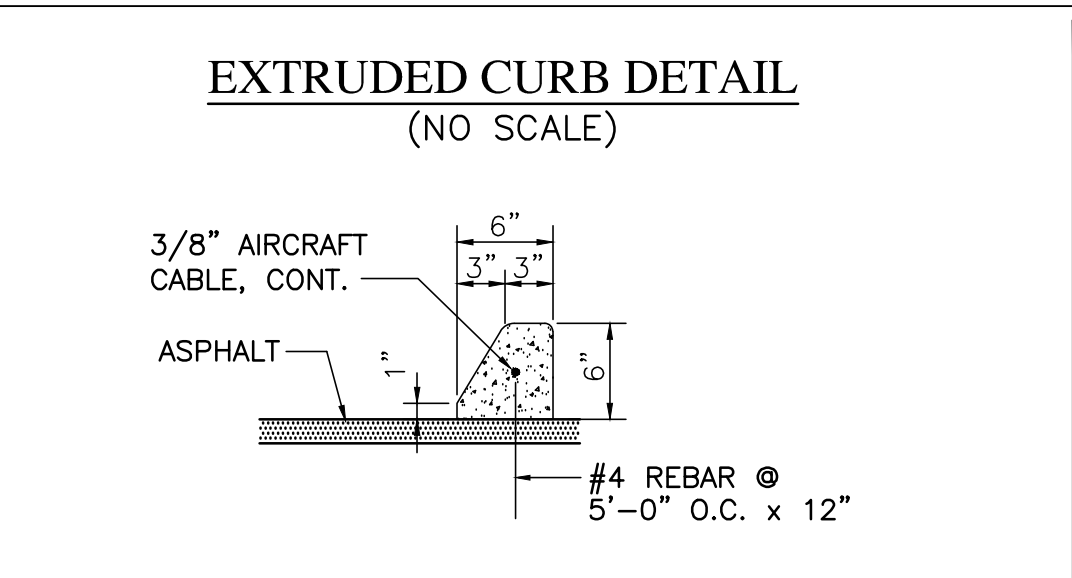
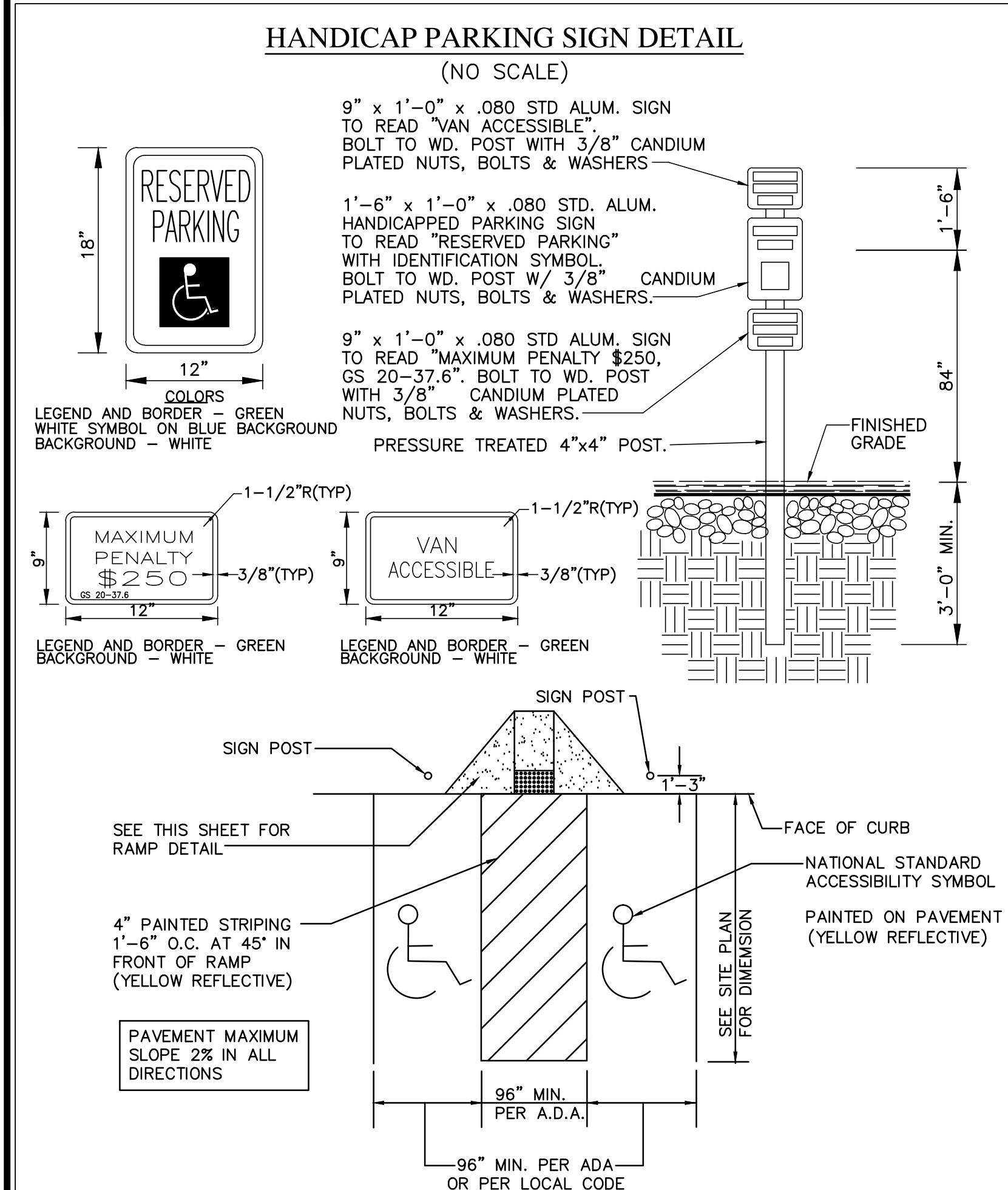
4004 & 4018 RIVER ROAD POND ASSOC., INC

P.O. BOX 15590 WILMINGTON, NC 28408

PORT CITY CONSULTING ENGINEERS, PLLC
6216 STONEBRIDGE ROAD WILMINGTON, NC 28409
910-599-1744 LICENSE No. P-1032

WET POND DETAILS

Sheet No. **C-7**



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

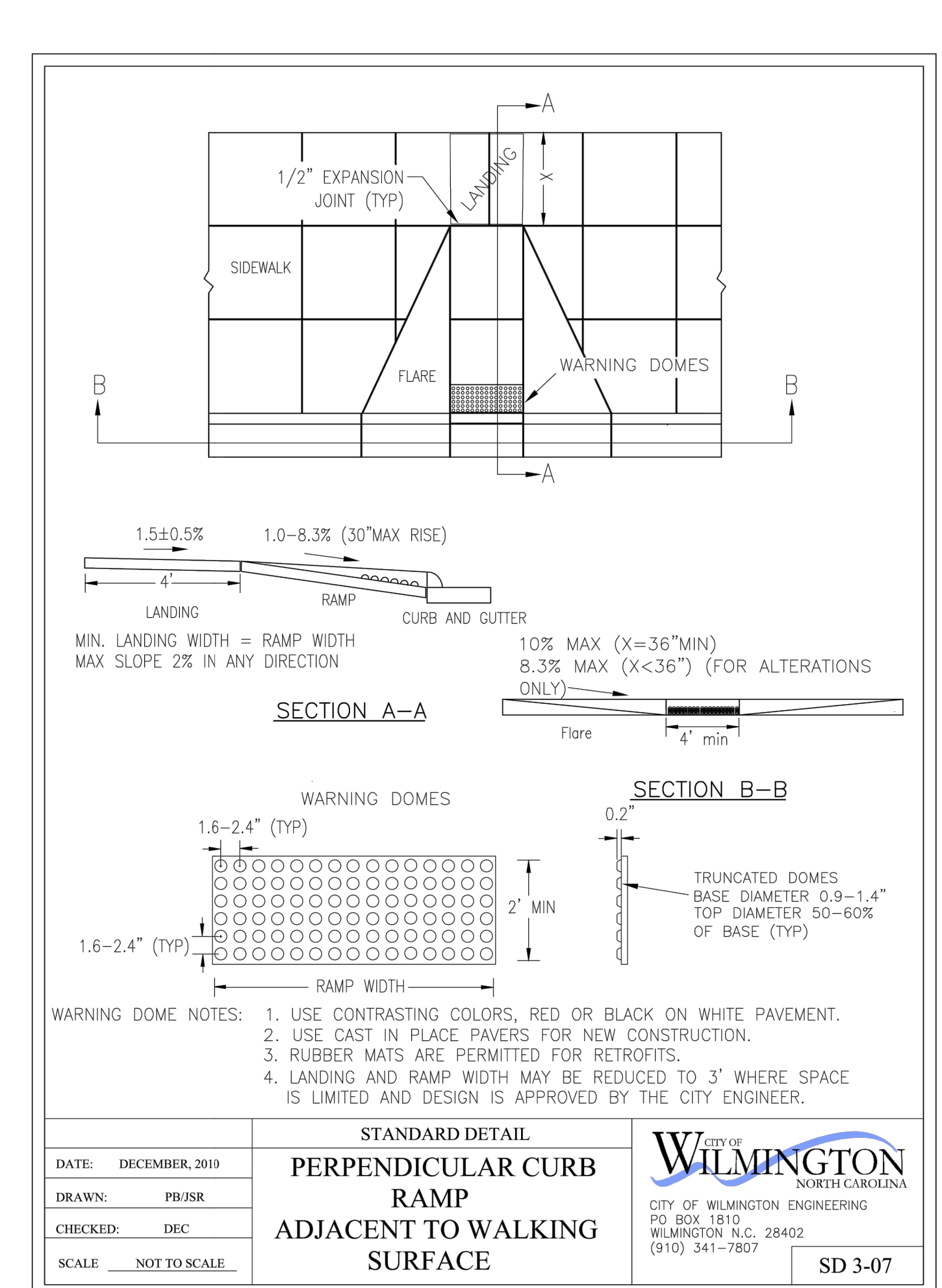
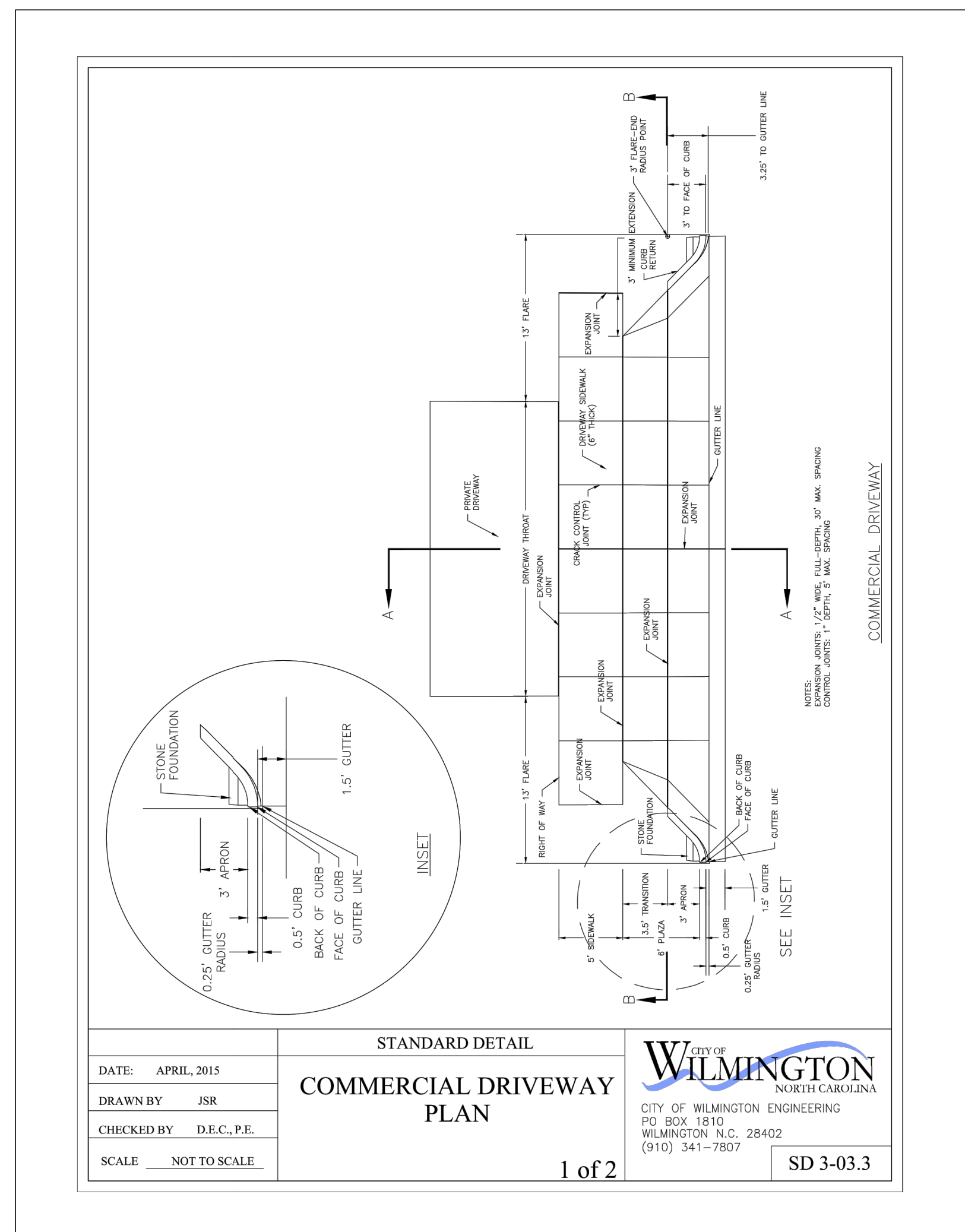
Name _____ Date _____

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON PROFESSIONAL SEAL 019742 ENGINEER MARK N. HARRIS



No.	Revision	Date	By	Designer	Scale
				MNH	AS SHOWN
				MNH	DATE APRIL, 2018
				MNH	JOB NO.

4004 & 4018 RIVER ROAD PROPERTIES

NEW HANOVER COUNTY NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC

P.O. BOX 15590 WILMINGTON, NC 28408

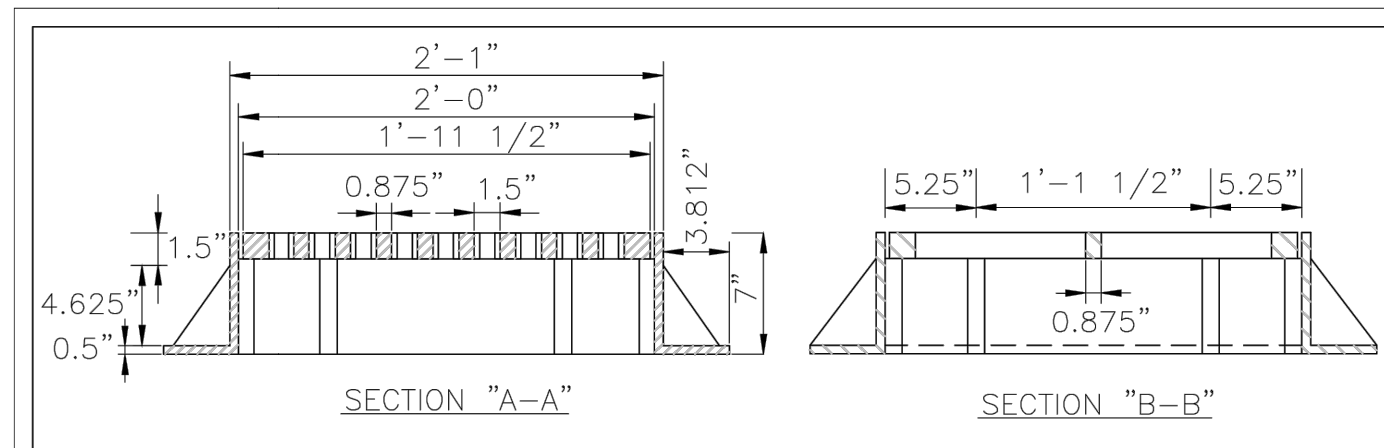
PORT CITY CONSULTING ENGINEERS, PLLC

6216 STONEBRIDGE ROAD WILMINGTON, NC 28409

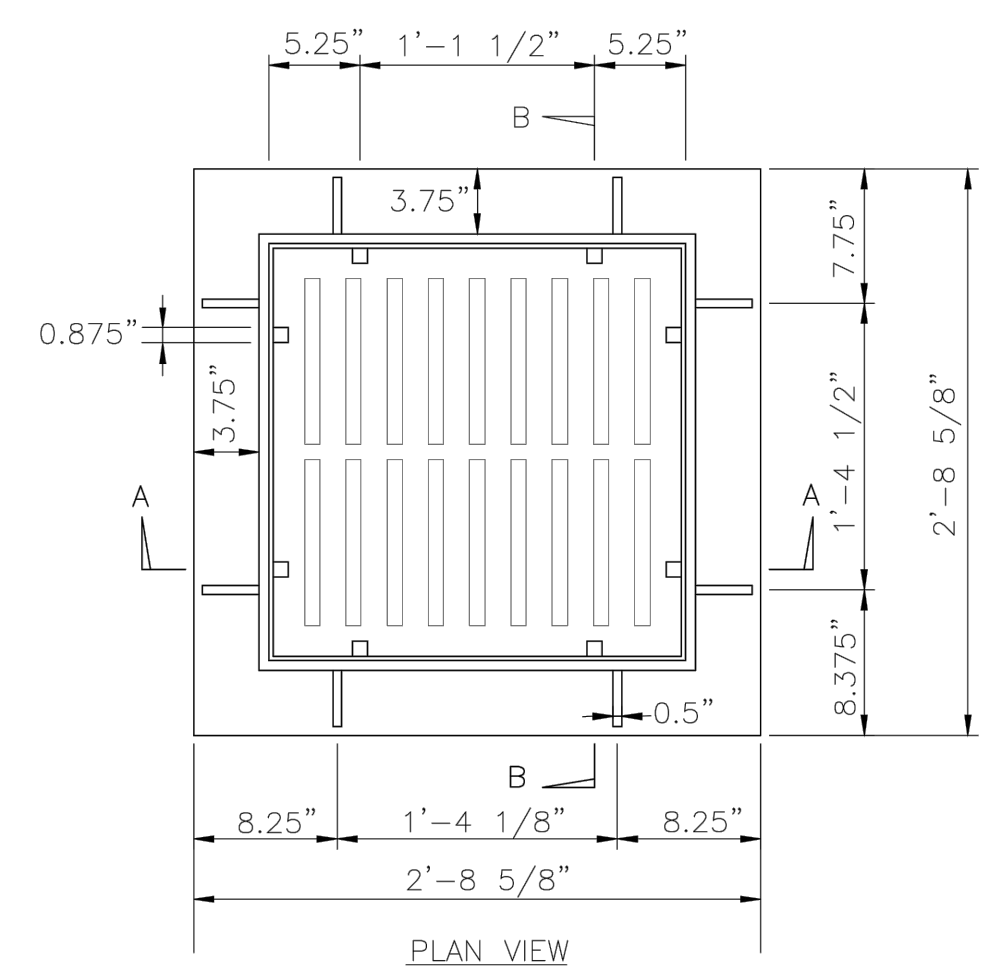
910-599-1744 LICENSE No. P-1032

MISCELLANEOUS DETAILS

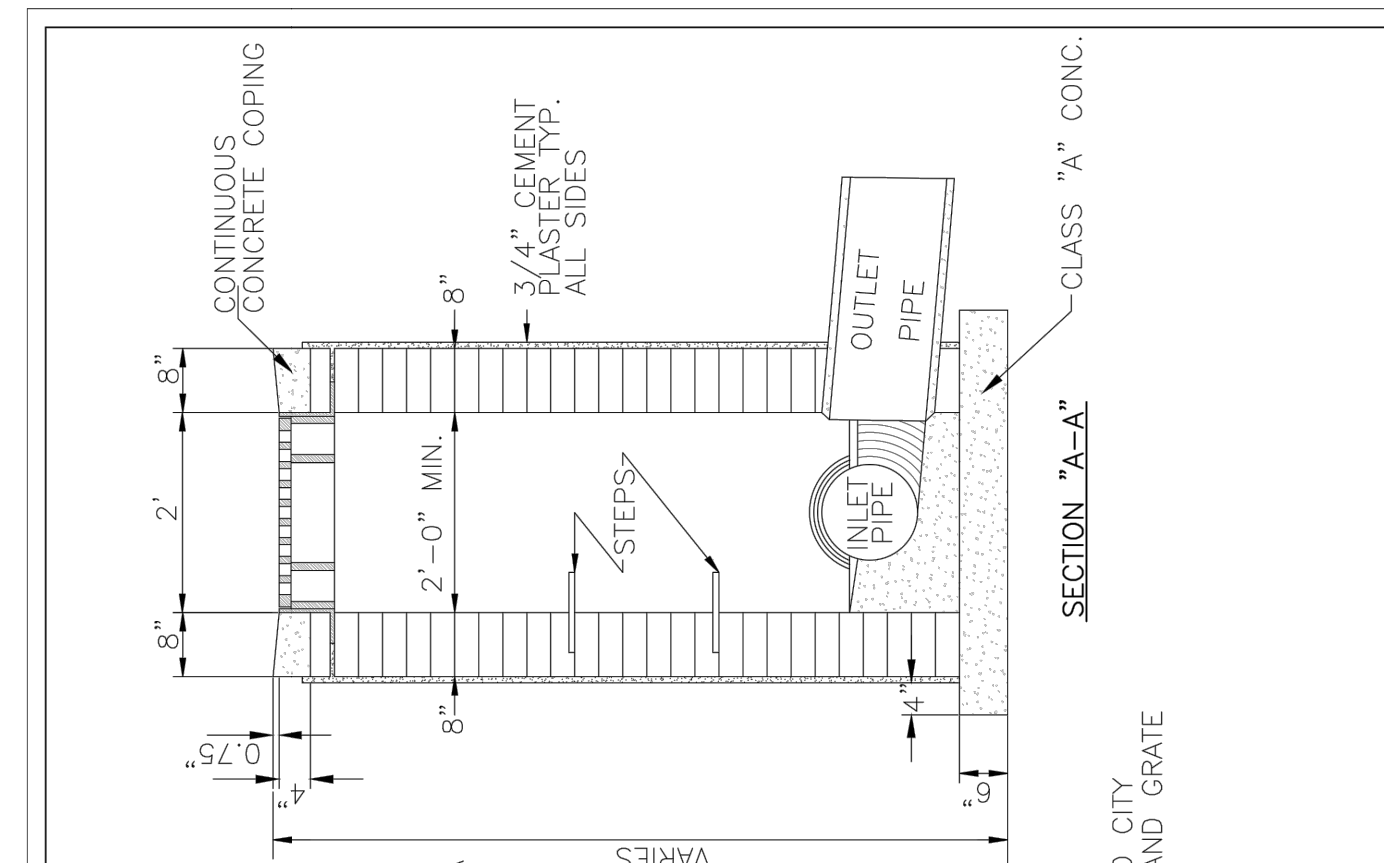
PRELIMINARY - DO NOT USE FOR CONSTRUCTION



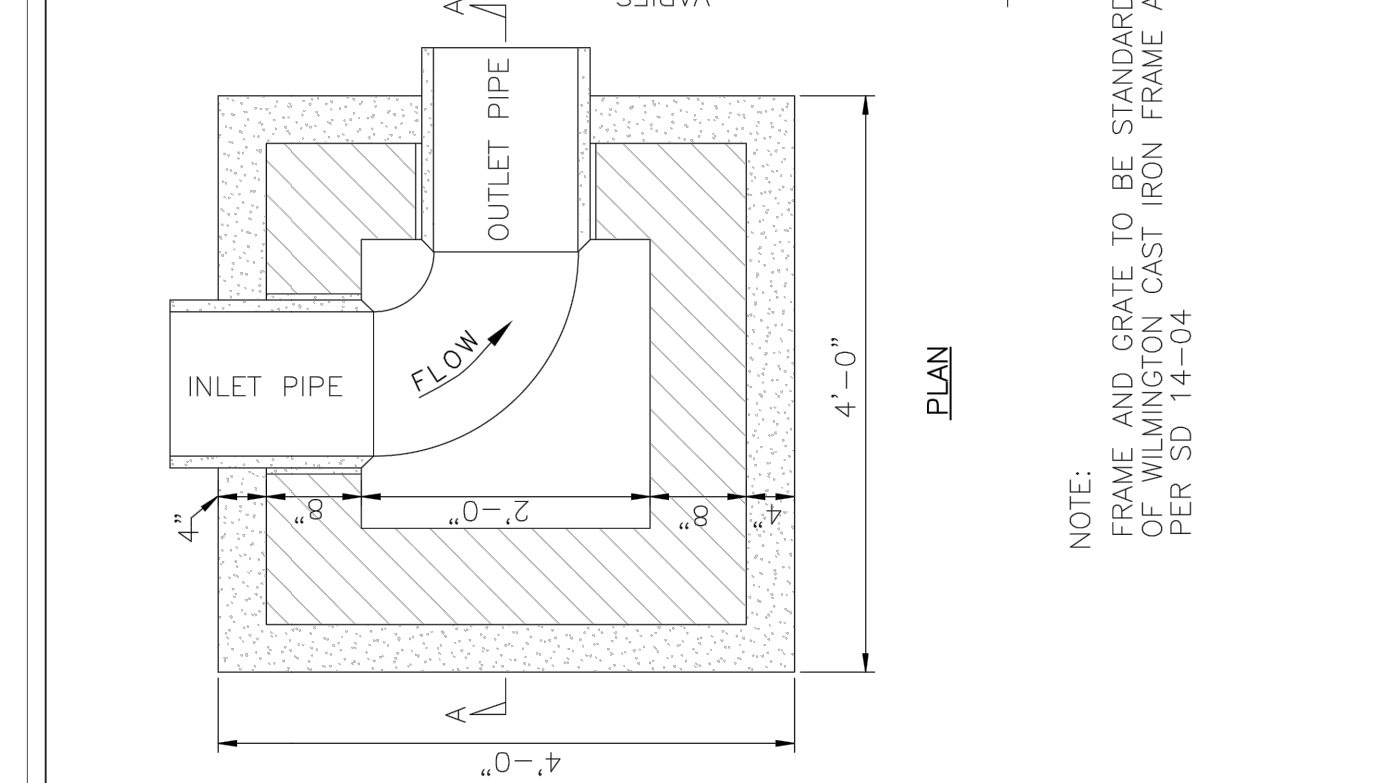
MINIMUM AVERAGE WEIGHT
FRAME 195 LBS.
GRATE 145 LBS.



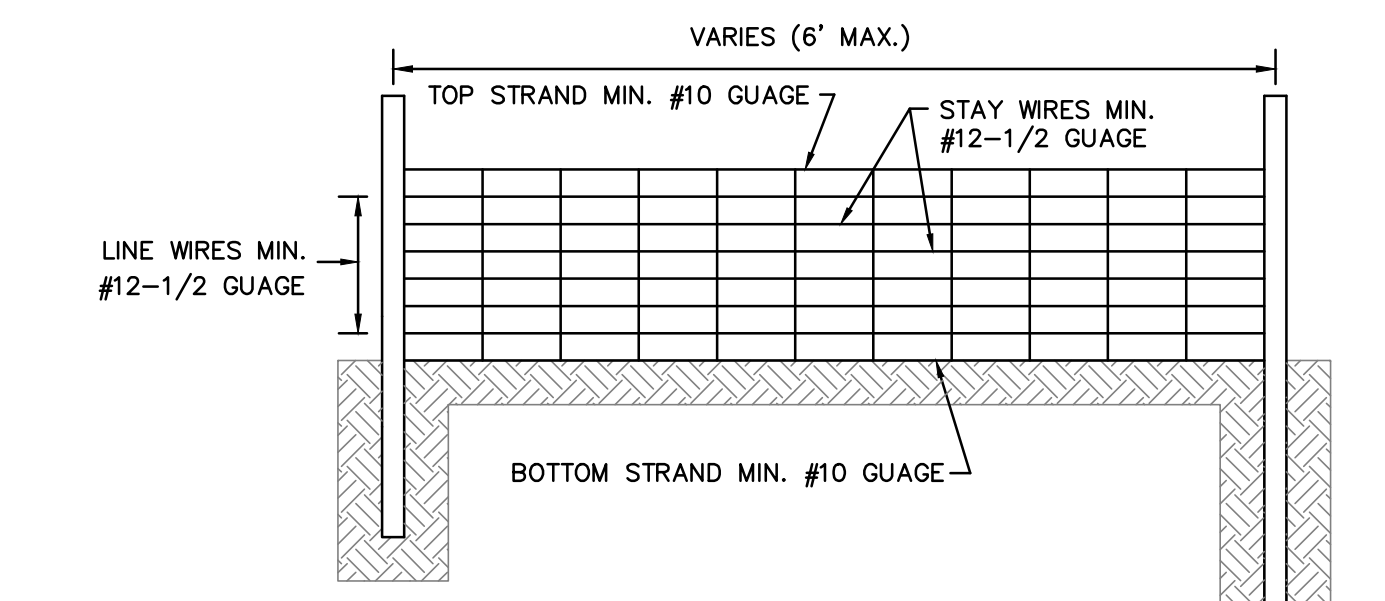
DATE: 2001	STANDARD DETAIL	<p>CITY OF WILMINGTON ENGINEERING P.O. BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 14-04
DRAWN BY JSR/CMR	GRILL BASIN CASTINGS		
CHECKED BY B.P., P.E.			
SCALE NOT TO SCALE			



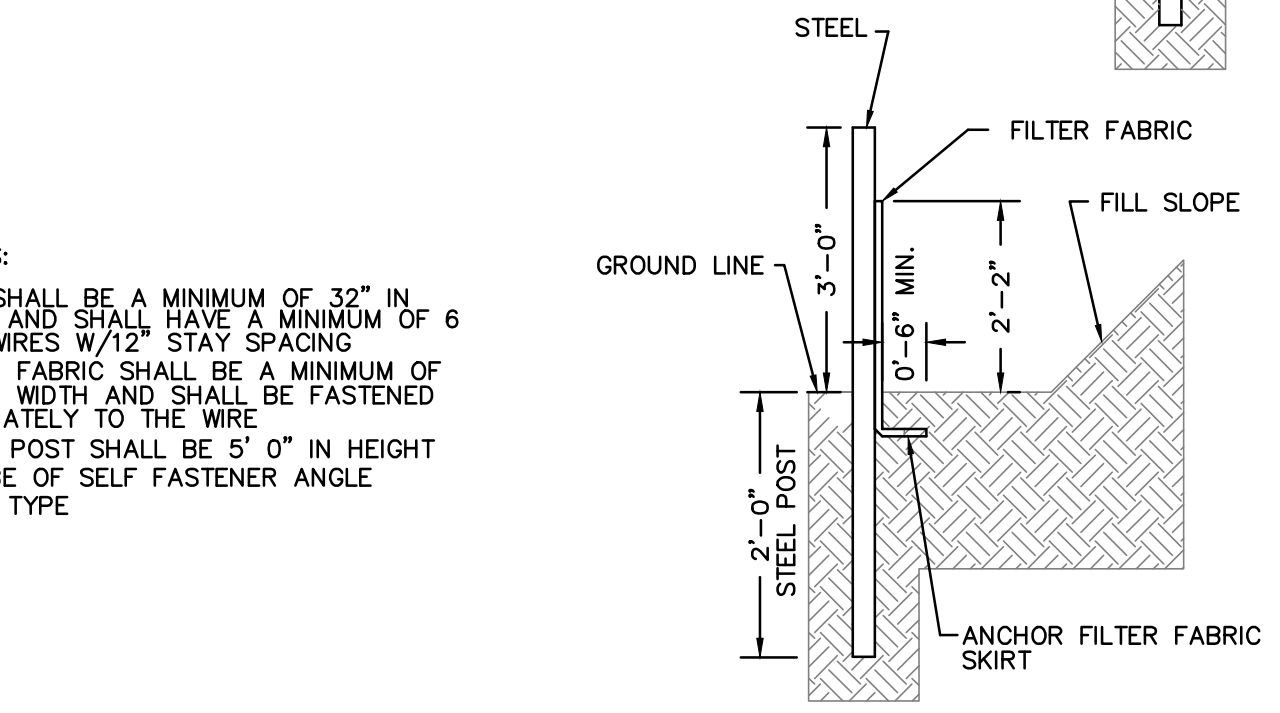
NOTE:
FRAME AND GRATE TO BE STANDARD CITY
OF WILMINGTON CAST IRON FRAME AND GRATE
PER SD 14-04



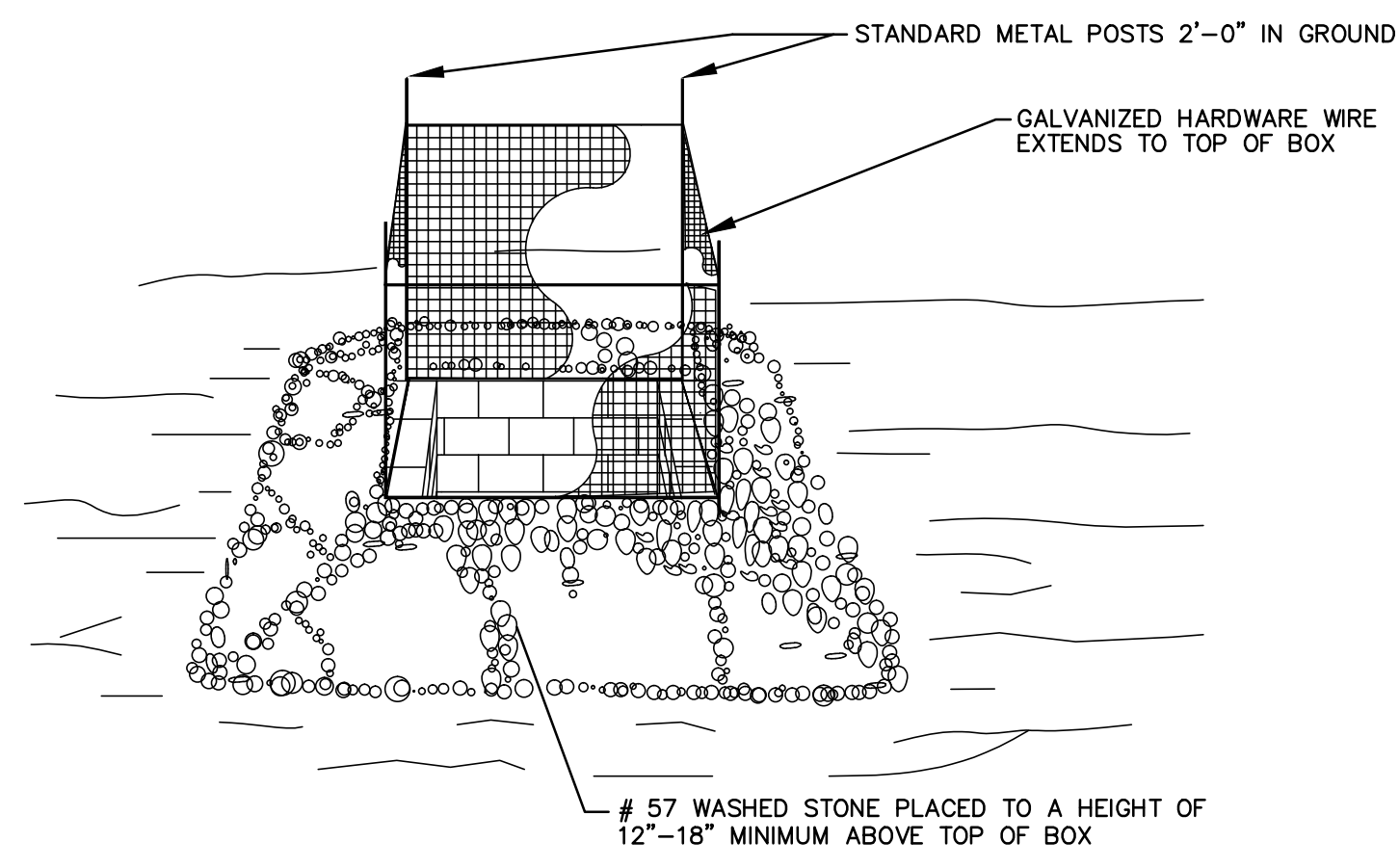
DATE: 2001	STANDARD DETAIL	<p>CITY OF WILMINGTON ENGINEERING P.O. BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 2-02
DRAWN BY JSR	GRILL BASIN		
CHECKED BY B.P., P.E.			
SCALE NOT TO SCALE			



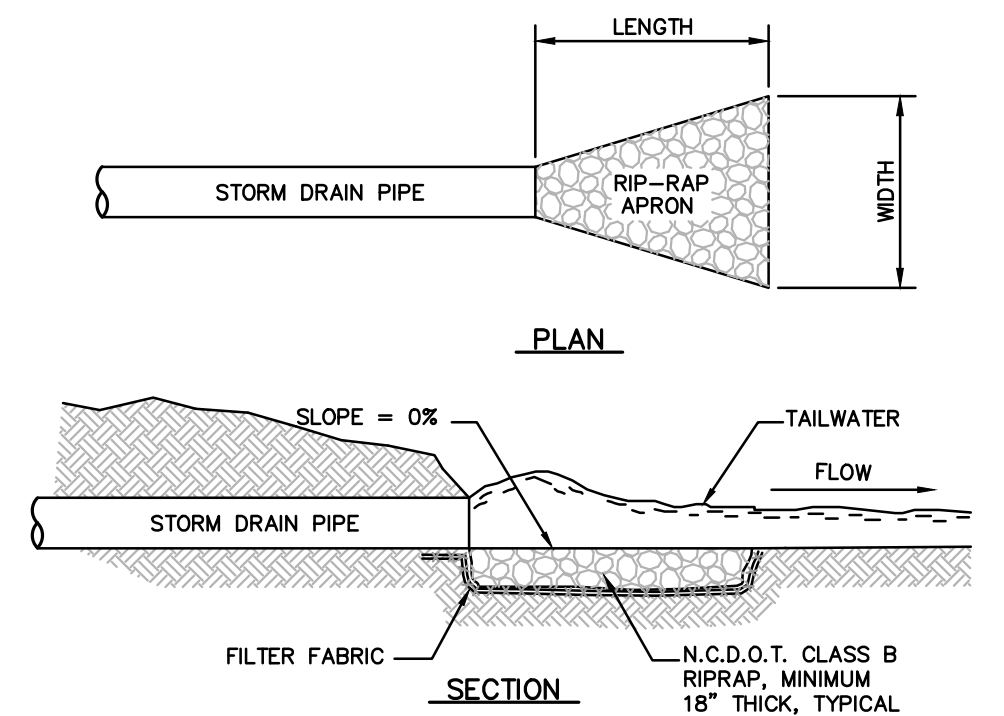
- NOTES:
1. WIRE SHALL BE A MINIMUM OF 3/2" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES W/1/2" STAY SPACING
 2. FILTER FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE
 3. STEEL POST SHALL BE 6" 0" IN HEIGHT AND BE OF SELF FASTENER ANGLE STEEL TYPE



SILT FENCE
N.T.S.

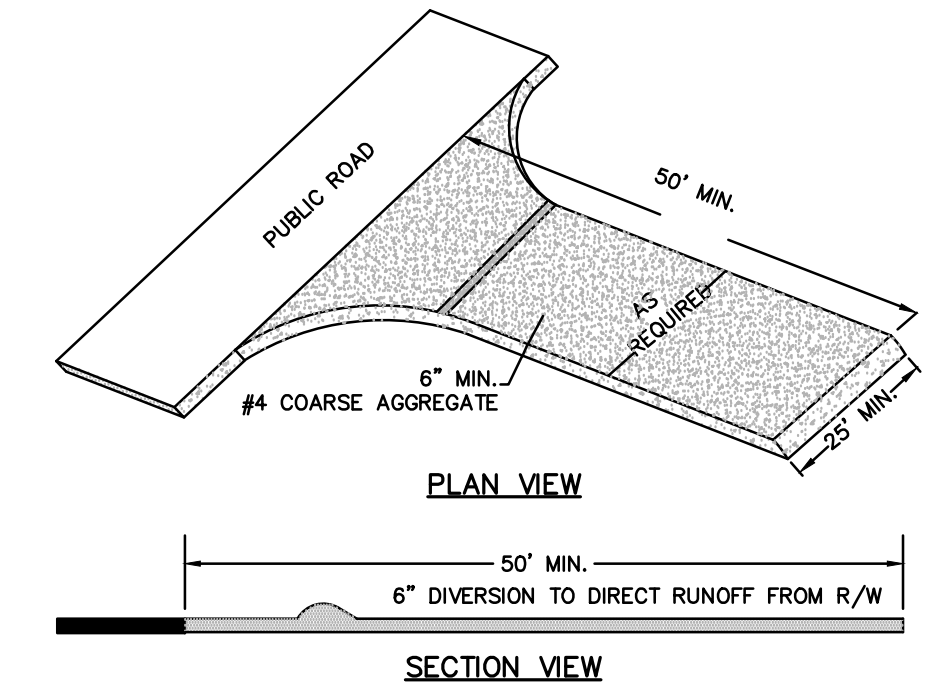
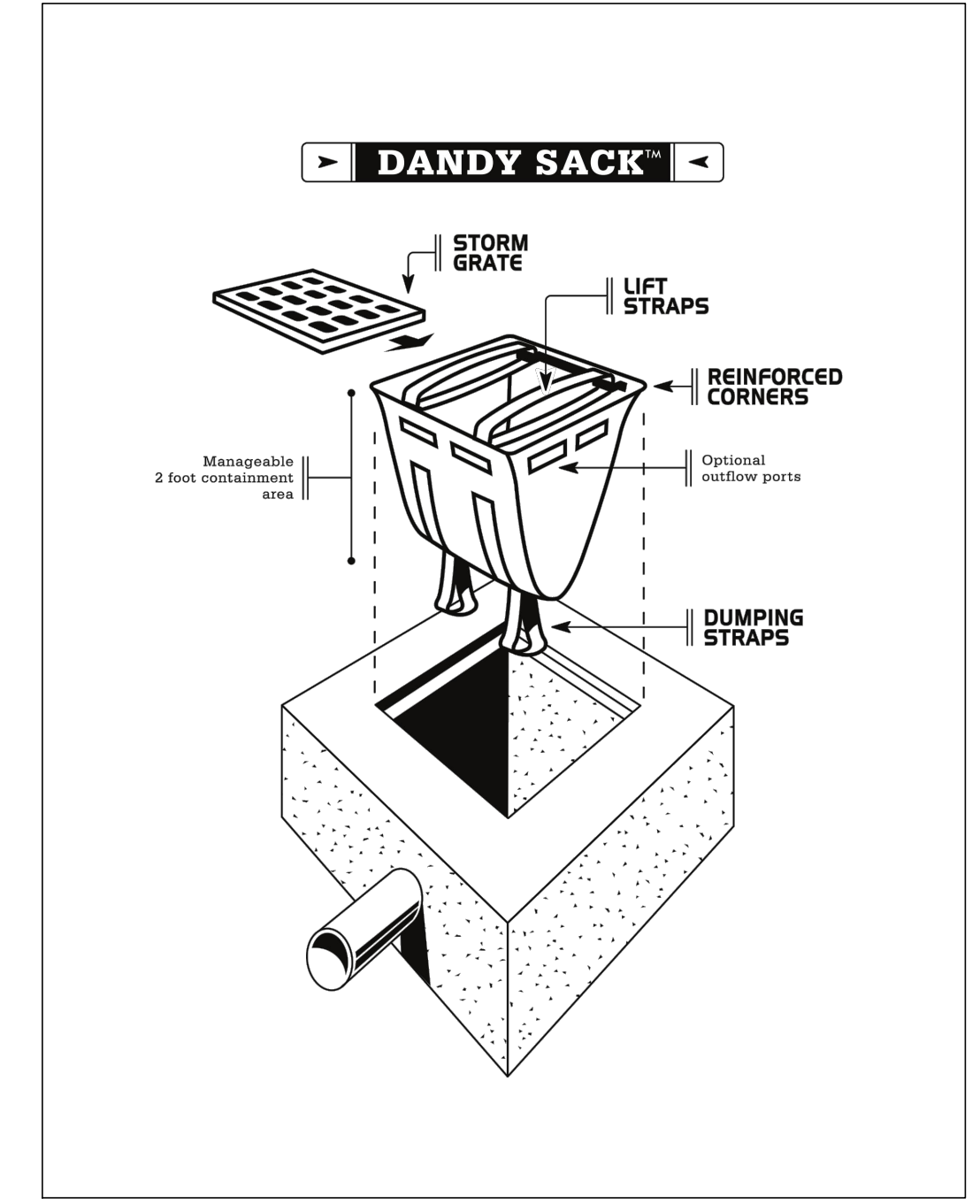


STANDARD CATCH BASIN/YARD INLET PROTECTION
N.T.S.



PIPE DIA. (IN.)	LENGTH (FT.)	UPSTREAM WIDTH (FT.)	DOWNSTREAM WIDTH (FT.)
RRA-1	24	8	6
RRA-2	24	8	6

RIP-RAP APRON
N.T.S.

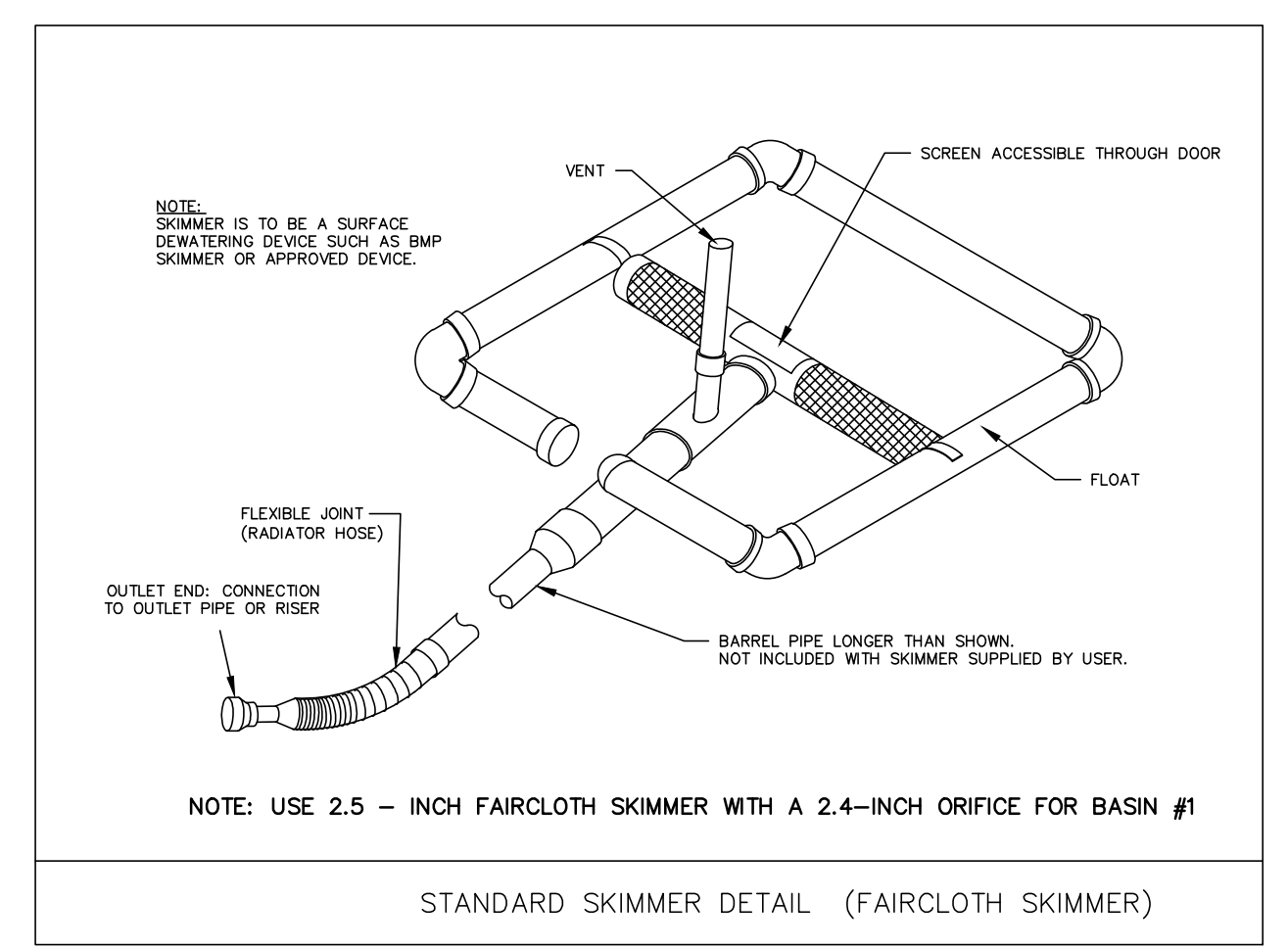


TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____



STANDARD SKIMMER DETAIL (FAIRCLOTH SKIMMER)

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By	Designer	Scale
				MNH	AS SHOWN
				MNH	DATE APRIL, 2018
				MNH	JOB NO.

4004 & 4018 RIVER ROAD PROPERTIES
 NEW HANOVER COUNTY NORTH CAROLINA

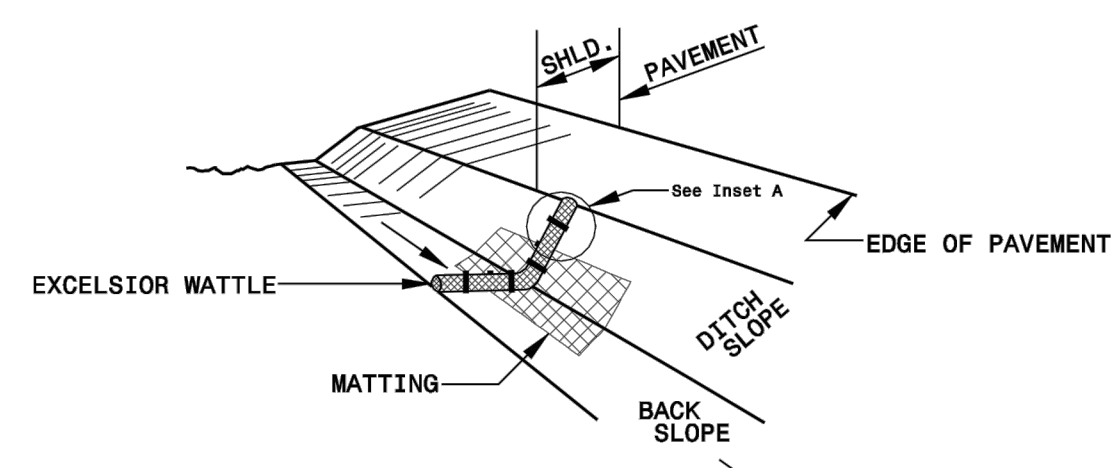
4004 & 4018 RIVER ROAD POND ASSOC., INC
 P.O. BOX 15590
 WILMINGTON, NC 28408

PORT CITY CONSULTING
 ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
 910-599-1744 LICENSE No. P-1032

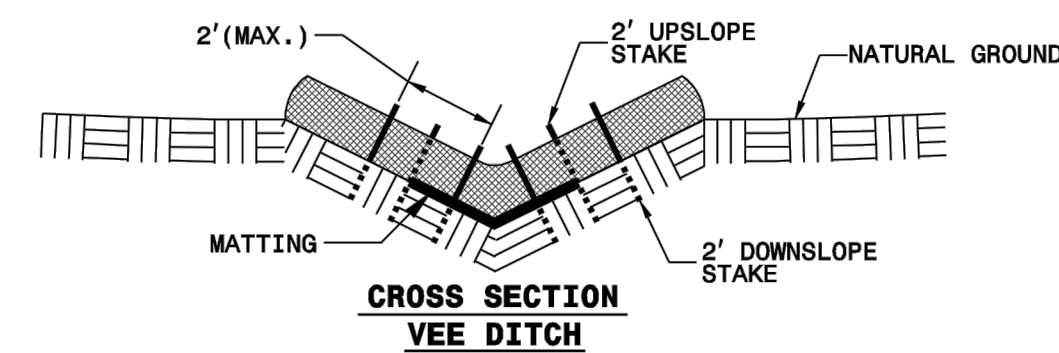
MISCELLANEOUS DETAILS
 Sheet No. **C-9**

WATTLE DETAIL

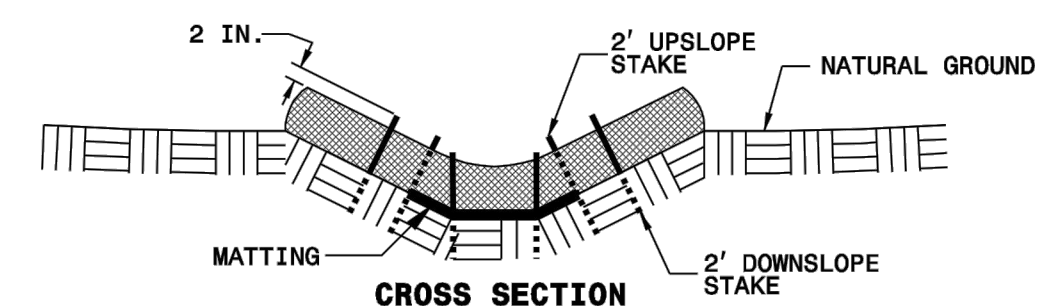
PROJECT REFERENCE NO. X-XXXX	SHEET NO. EC-20
DATE XXXX	ISSUED BY XXXX
DESIGNED BY XXXX	CHECKED BY XXXX



ISOMETRIC VIEW

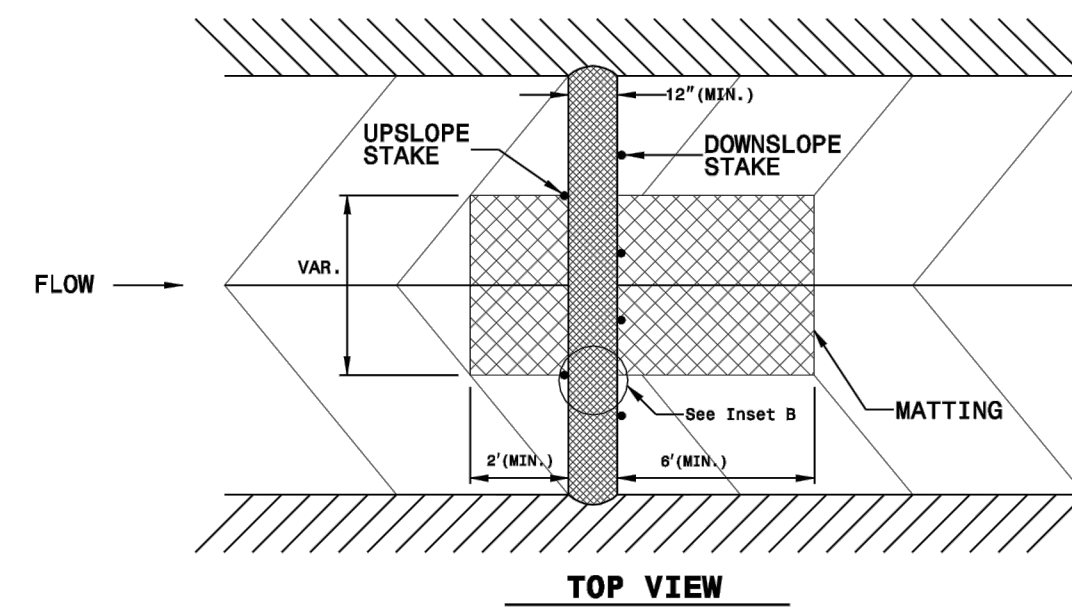
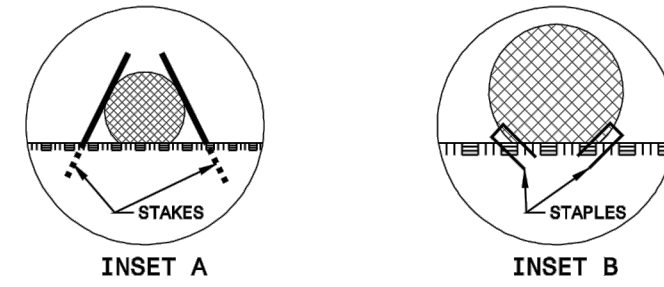


CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:
 USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
 USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
 PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
 INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
 INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



TOP VIEW



PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	APRIL, 2018
Checked By	MNH	Job No.	

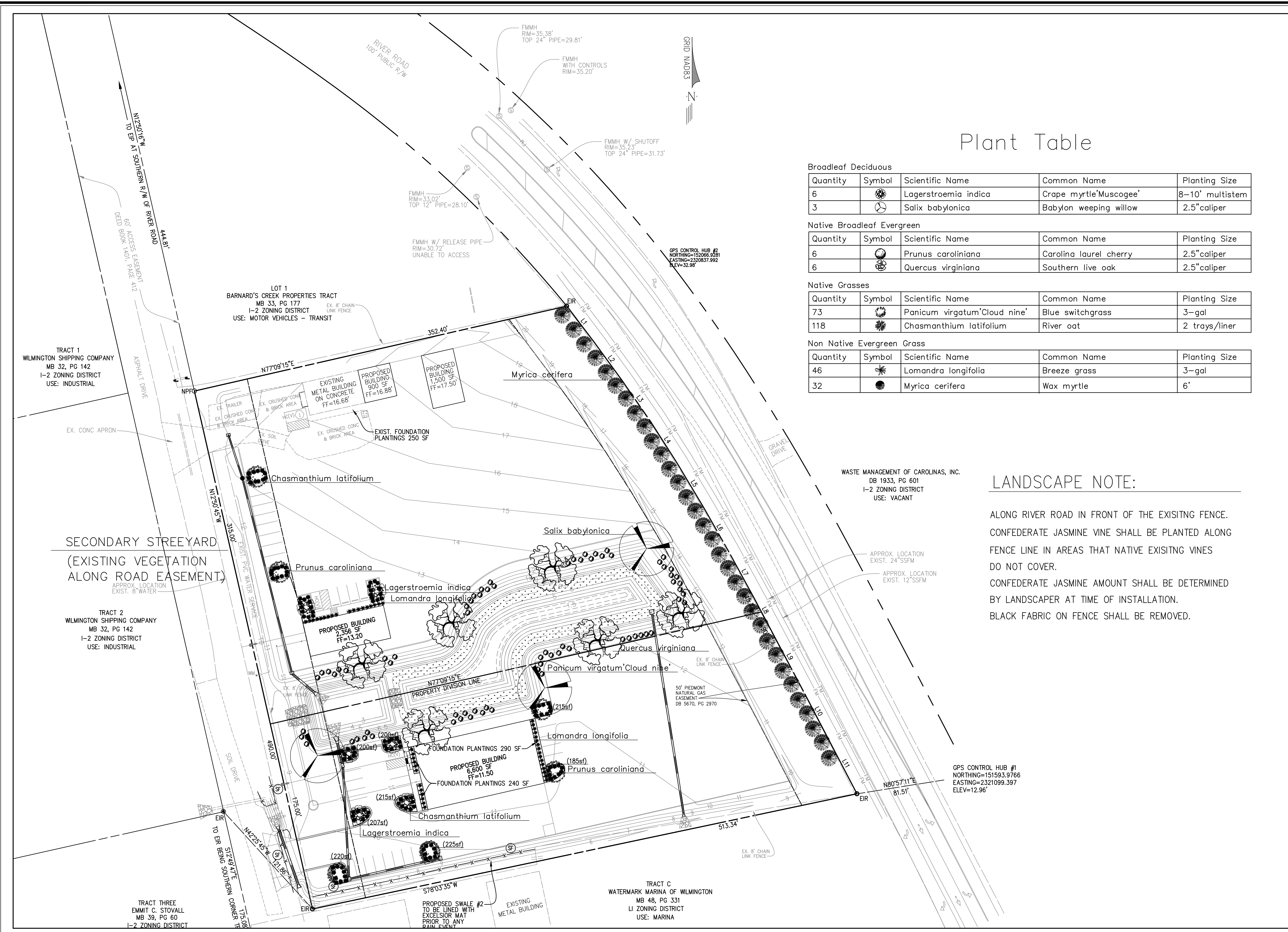
4004 & 4018 RIVER ROAD PROPERTIES
 NEW HANOVER COUNTY NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC
 P.O. BOX 15590
 WILMINGTON, NC 28408

PORT CITY CONSULTING ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
 910-599-1744 LICENSE No. P-1032

MISCELLANEOUS DETAILS

Sheet No. C-10



Plant Table

Broadleaf Deciduous				
Quantity	Symbol	Scientific Name	Common Name	Planting Size
6	☉	Lagerstroemia indica	Crape myrtle 'Muscogee'	8-10' multistem
3	☉	Salix babylonica	Babylon weeping willow	2.5" caliper
Native Broadleaf Evergreen				
Quantity	Symbol	Scientific Name	Common Name	Planting Size
6	☉	Prunus caroliniana	Carolina laurel cherry	2.5" caliper
6	☉	Quercus virginiana	Southern live oak	2.5" caliper
Native Grasses				
Quantity	Symbol	Scientific Name	Common Name	Planting Size
73	☉	Panicum virgatum 'Cloud nine'	Blue switchgrass	3-gal
118	☉	Chasmanthium latifolium	River oat	2 trays/liner
Non Native Evergreen Grass				
Quantity	Symbol	Scientific Name	Common Name	Planting Size
46	☉	Lomandra longifolia	Breeze grass	3-gal
32	☉	Myrica cerifera	Wax myrtle	6'

LANDSCAPE NOTE:

ALONG RIVER ROAD IN FRONT OF THE EXISTING FENCE. CONFEDERATE JASMINE VINE SHALL BE PLANTED ALONG FENCE LINE IN AREAS THAT NATIVE EXISTING VINES DO NOT COVER. CONFEDERATE JASMINE AMOUNT SHALL BE DETERMINED BY LANDSCAPER AT TIME OF INSTALLATION. BLACK FABRIC ON FENCE SHALL BE REMOVED.

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Approved Construction Plan

Name _____ Date _____

Planning _____

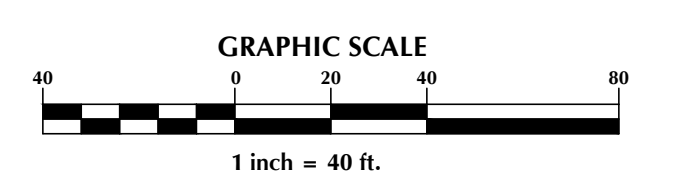
Traffic _____

Fire _____

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

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PRELIMINARY - DO NOT USE FOR CONSTRUCTION

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Designer	MNH	Scale	AS SHOWN
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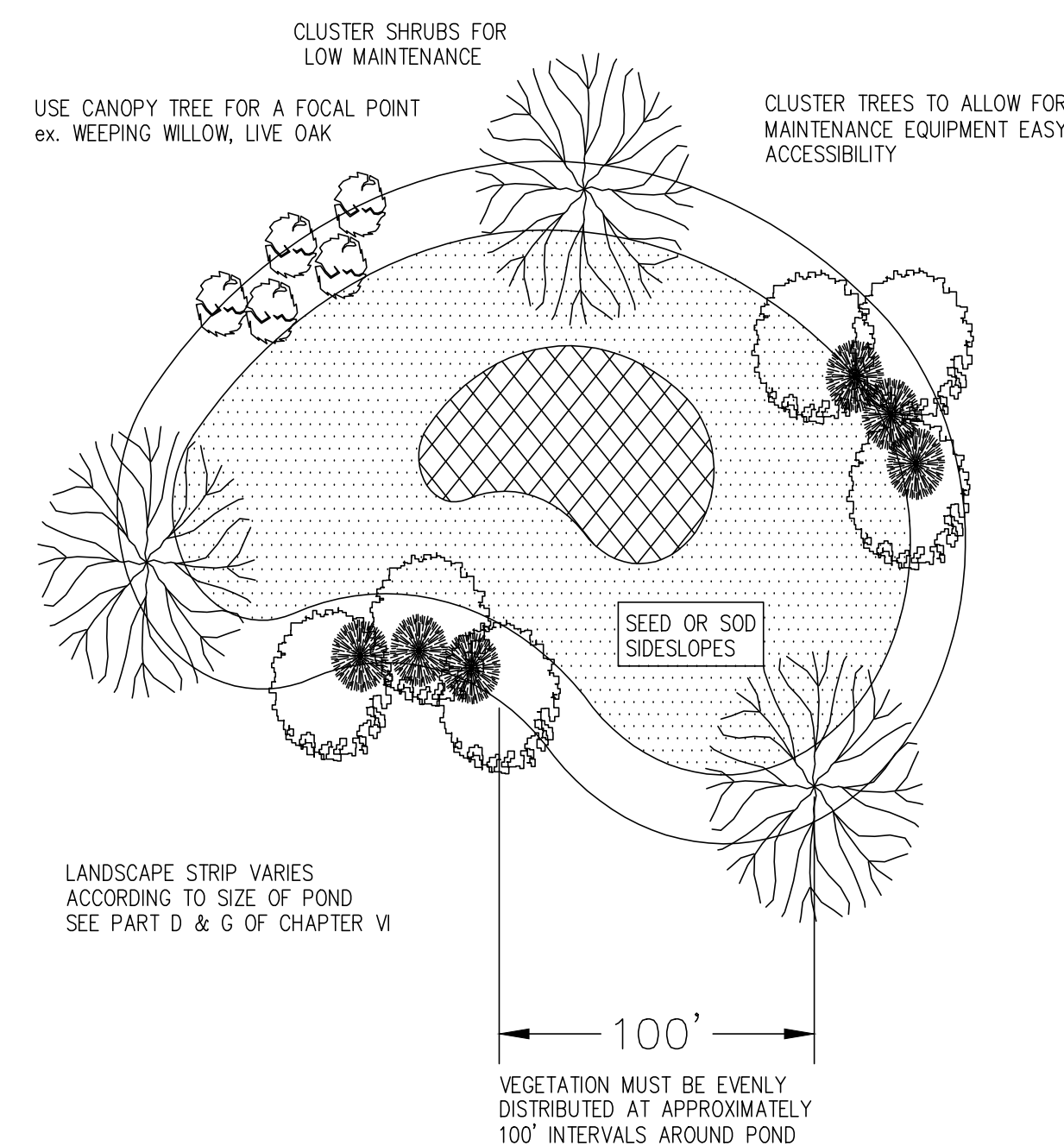
4004 & 4018 RIVER ROAD PROPERTIES
RIVER ROAD
NEW HANOVER COUNTY NORTH CAROLINA

4004 & 4018 RIVER ROAD POND ASSOC., INC
P.O. BOX 15590
WILMINGTON, NC 28408

DESIGN SOUTH-DONNA CLEMMONS
LANDSCAPE ARCHITECT, ASLA
WRIGHTSVILLE BEACH, NC
910 550 8788

LANDSCAPE PLAN
DRAWN BY: DDC
DATE: 8/10/2016
REVISED: 10/27/17

Sheet No.
L-1

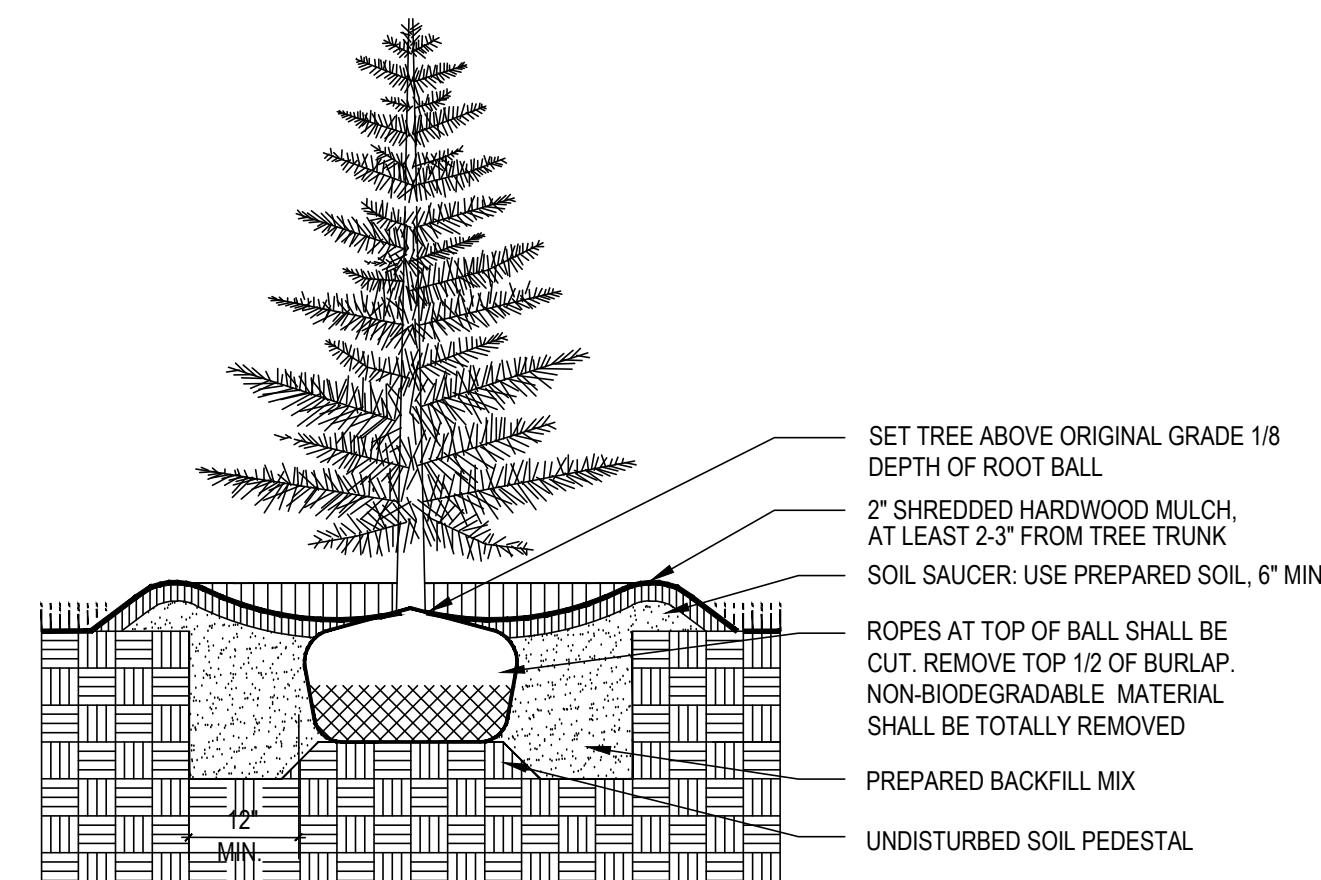


- Notes:
1. If possible, locate pond where vegetation exists.
 2. Suggest minimal clearing to conserve visual quality of site and minimize the additional of tree planting. An irregular shape provides a more natural appearance.
 3. Landscape strip shall be a maximum slope of 7:1 in order to plant vegetation.
 4. Provide a minimum of 3 inches of mulch around all vegetation.

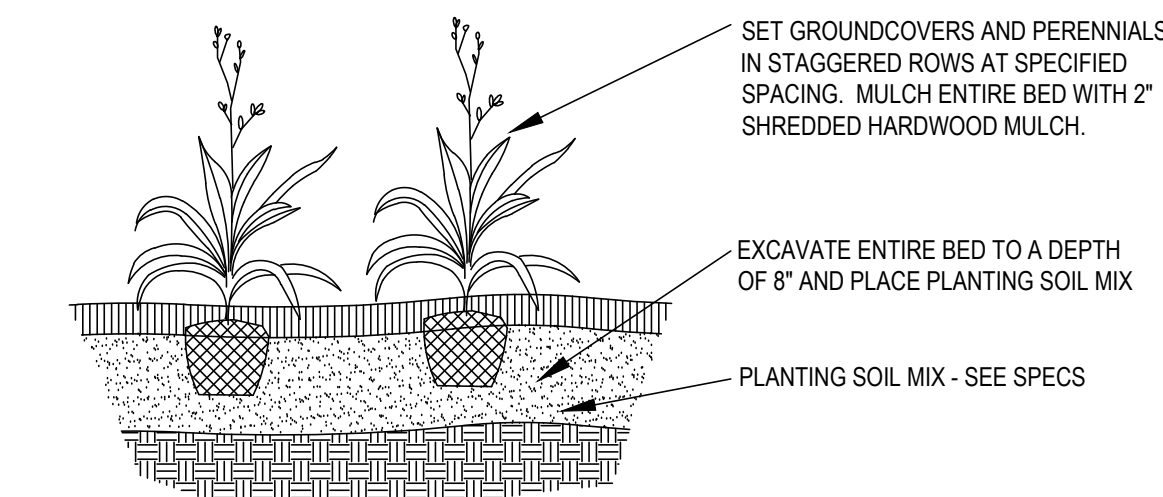
TYPICAL STORM WATER FACILITY LANDSCAPING PLAN
SD 15-16
NOT TO SCALE

STORMWATER FACILITY LANDSCAPING CALCULATION

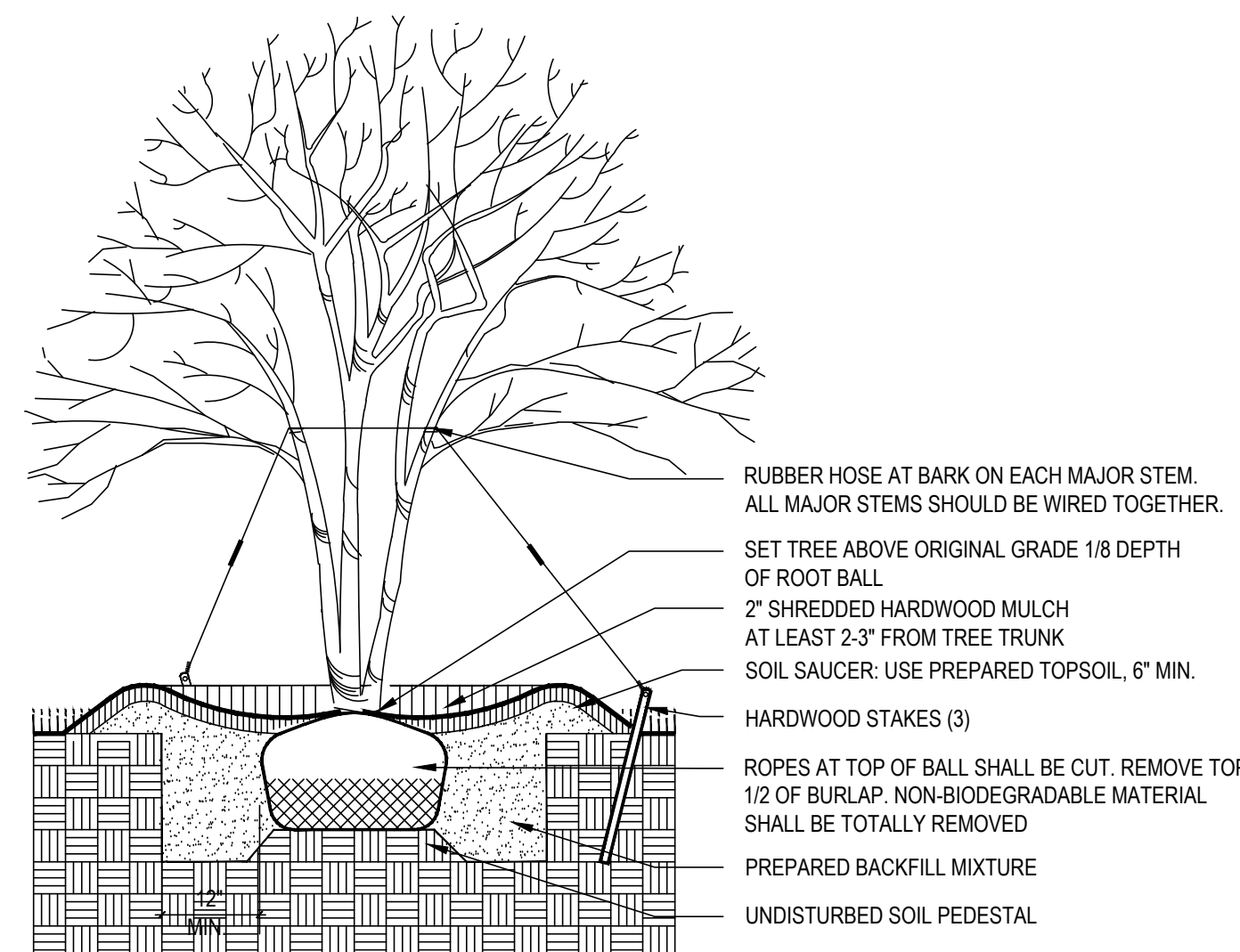
BASIN #	TOP OF BANK LINEAR FOOTAGE	VEGETATION CLUSTERS REQUIRED	VEGETATION CLUSTERS PROVIDED	TYPE OF CLUSTER PROVIDED
1	872	872 / 100 = 8.72	9	CANOPY TREE



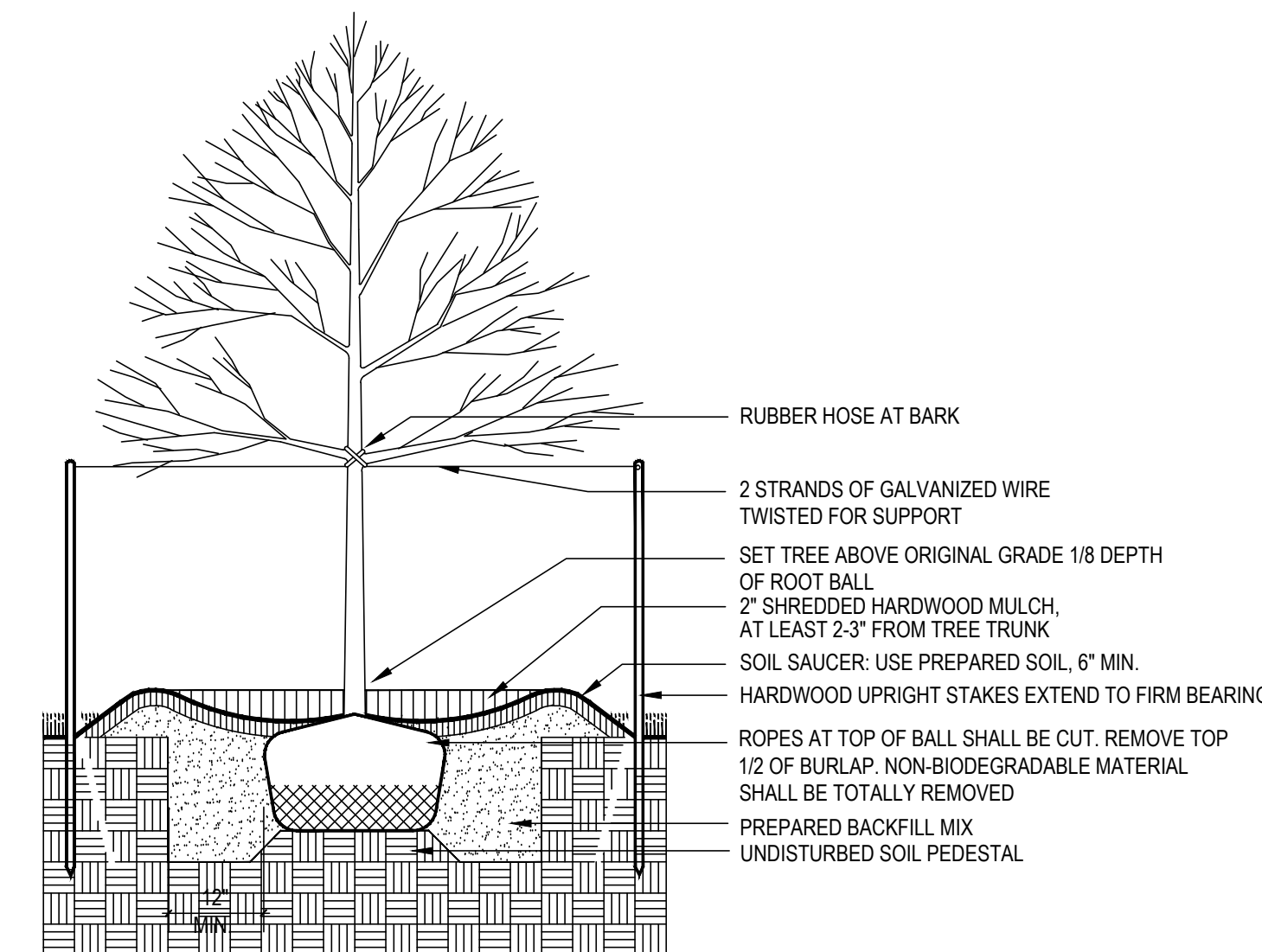
5 EVERGREEN TREE PLANTING
NTS



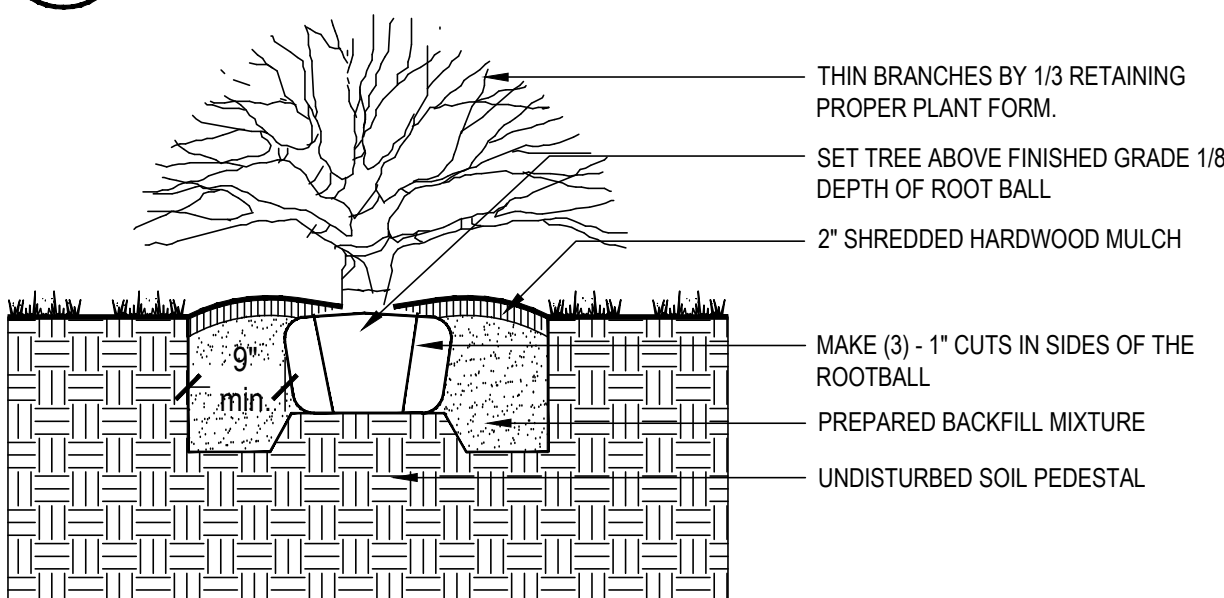
1 GROUNDCOVER PLANTING
N.T.S.



2 ORNAMENTAL TREE PLANTING
NTS



3 DECIDUOUS TREE PLANTING
NTS



4 TYP. B&B SHRUB PLANTING
N.T.S.

STREETYARD LANDSCAPING REQUIREMENTS
(per Section 18-477)

STREETYARD FACTOR FOR LI (60' ACCESS EASEMENT)	29 TREES
SECONDARY STREETYARD - WAX MYRTLES	22
PLEASE SEE LANDSCAPE NOTE ON SHEET L1 CONCERNING RIVER ROAD STREETYARD	

PARKING LOT INTERIOR LANDSCAPING REQUIREMENTS for NORTH SIDE PARKING LOT
(per Section 18-481)

AREA OF VEHICULAR (PARKING) AND PEDESTRIAN USE (NORTH SIDE)	2476 SF
REQUIRED LANDSCAPING (15,780 SF x 0.08)	198.08 SF
TREES (1 PER ISLAND)	4 TREES
PROVIDED LANDSCAPING:	1157.97 SF
TREES (1 PER ISLAND)	4 TREES

PARKING LOT INTERIOR LANDSCAPING REQUIREMENTS for SOUTHSIDE PARKING LOT
(per Section 18-481)

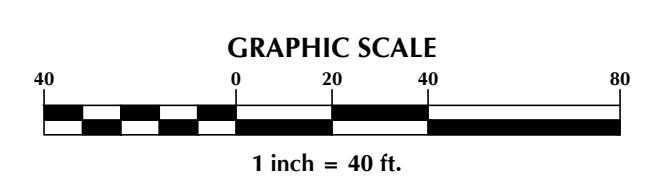
AREA OF VEHICULAR (PARKING) AND PEDESTRIAN USE (SOUTH SIDE)	15,780 SF
REQUIRED LANDSCAPING (15,780 SF x 0.08)	1,262 SF
TREES (1 PER ISLAND)	12 TREES
PROVIDED LANDSCAPING:	1,660 SF
TREES (1 PER ISLAND)	12 TREES

FOUNDATION PLANTINGS REQUIREMENTS
(per Section 18-490)

EXISTING BUILDING FOUNDATION PLANTINGS REQUIRED	900 SF
AREA OF BUILDING FACE	108 SF
AREA (900 SF x 0.12)	
EXISTING BUILDING FOUNDATION PLANTINGS PROVIDED	250 SF
AREA	
PROPOSED BUILDING FOUNDATION PLANTINGS REQUIRED (FRONT)	1,200 SF
AREA OF BUILDING FACE	144 SF
AREA (1,200 SF x 0.12)	
PROPOSED BUILDING FOUNDATION PLANTINGS PROVIDED (FRONT)	240 SF
AREA	
PROPOSED BUILDING FOUNDATION PLANTINGS REQUIRED (REAR)	1,200 SF
AREA OF BUILDING FACE	144 SF
AREA (1,200 SF x 0.12)	
AREA PROPOSED BUILDING FOUNDATION PLANTINGS PROVIDED (REAR)	290 SF

LANDSCAPE NOTE FOR STREETYARD PLANTING

WAX MYRTLES TO BE PLANTED AT BASE OF FENCE BECAUSE OF EXISTING FORCE MAINS



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Approved Construction Plan

Name _____ Date _____

Planning _____

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CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

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Signed: _____

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

No.	Revision	Date	By	Designer	Scale
evNum1	Revision1	Rev1Date	Rev1by	Designer	Scale
evNum2	Revision2	Rev2Date	Rev2by	Drawn By	Date
evNum3	Revision3	Rev3Date	Rev3by	Checked By	Job No.
evNum4	Revision4	Rev4Date	Rev4by	Checked	JobNumber
evNum5	Revision5	Rev5Date	Rev5by		

4004 & 4018 RIVER ROAD PROPERTIES
WILMINGTON, N.C.

4004 & 4018 RIVER ROAD POND ASSOC., INC.
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DESIGN SOUTH-DONNA CLEMMONS
LANDSCAPE ARCHITECT, ASLA
WRIGHTSVILLE BEACH, NC
910 550 8788

LANDSCAPE PLAN

DRAWN BY: DDC
DATE: 8/10/2016
REVISED: 10/12/16

Sheet No.
L-2